PERCEIVED STIGMA AND HIV STATUS DISLOSURE AMONG HIV POSITIVE YOUNG PEOPLE RECEIVING TREATMENT AT UNIVERSITY OF ABUJA TEACHING HOSPITAL, GWAGWALADA

By

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DECLARATION

I, Aderonke Anna POPOOLA, of the University of Ibadan, Ibadan, Oyo-State, Nigeria, hereby declare that this dissertation entitled: "**Perceived Stigma and HIV Status Disclosure among HIV Positive Young People Receiving Treatment at University of Abuja Teaching Hospital, Gwagwalada**" has been written by me and that it is a record of my own research work. It has not been presented in any form for another degree or diploma in any other institution. All questions and sources of information have been duly acknowledged in the reference section.

Signature.....

Date.....13/01/17.....

CERTIFICATION

This is to certify that, this dissertation entitled: "**Perceived Stigma and HIV Status Disclosure among HIV Positive Young People Receiving Treatment at University of Abuja Teaching Hospital, Gwagwalada**" by Aderonke Anna POPOOLA was carried out under our supervision and has been approved for submission to the Department of Epidemiology and Medical Statistics in partial fulfillment of the requirements for award of the degree of Masters of Public Health in Field Epidemiology of the University of Ibadan.

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DEDICATION

This work is dedicated to my husband – Engineer Emmanuel Ogoh in acknowledgement of the grace and mercy of God upon his life and also to me.

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ABSTRACT

Stigma has been identified as a major barrier to the disclosure of HIV status; this constitutes a serious public health challenge to halting the spread of new infections. Evidence in Nigeria has shown that young people aged 15-24 years have higher incidence of HIV infection. Attaining the goal of zero new HIV infection partly depends on HIV status disclosure and social support for young people living with the virus. This study assessed the perceived stigma and status disclosure among HIV positive young people receiving treatment at the University of Abuja Teaching Hospital, Gwagwalada.

A descriptive cross-sectional study was carried out using both quantitative and qualitative methods. A total population of 230 HIV positive young people aged 15-24 years receiving treatment in the hospital was assessed. A semi-structured questionnaire was used to obtain data on socio-demographic characteristics, knowledge of HIV transmission and prevention, perception of HIV/AIDS stigma as well as disclosure of HIV status (act of informing others about ones HIV sero-positive status). The knowledge of HIV and perception of stigma were assessed on a scale of 8 and 80 points, respectively. Good knowledge of HIV and positive perception of HIV stigma were based on scores 8 and ≥ 50, respectively. Data were analysed using descriptive statistics and logistic regression at $p = 0.05$. Qualitative data obtained from Focus Group Discussions (FGD) using FGD guide were analysed thematically.

Age of respondents was 20.2±2.8 years and 77% were female. Majority of the respondents were never married (88.7%) and more than half (62.2%) had completed secondary education. The family profile revealed that 70.1% were from monogamous homes while, 60.4% lived with both parents. Most (78.3%) had good knowledge of HIV. Above half (54.3%) had negative perception of HIV stigma while, 42.2% had disclosed their HIV status. Of those that had disclosed their

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status, 70% disclosed to their mothers. Respondents aged 20-24 years [AOR=5.26 (CI=2.09-13.27)] were more likely to disclose their HIV status compared to those aged 15-19. Respondents that were married/cohabiting/divorced [AOR= 0.02 (CI=0.001-0.25)] compared to those that were never married were less likely to disclose their HIV status. Also, disclosure of HIV status was less likely among respondents who have ≥7 [AOR=0.05 (CI=0.01-0.33)] compared to those who have ≤ 3 siblings. Respondents aged 15-19 years [AOR=2.36 (CI=1.33-4.12)] compared to those aged 20-24 were more likely to have positive perception of HIV stigma. Similarly, positive perception of HIV stigma was more likely among respondents whose highest level of education was primary and below [AOR= 2.13 (CI=1.04-4.36)]. Majority of the FGDs discussants revealed that avoidance by family members and friends and feeling of guilt were major barriers to disclosure of HIV status.

Disclosure of HIV status was low and perceived stigma was high among the youth receiving treatment at University of Abuja Teaching Hospital. There is the need for education and counseling of young people living with HIV/AIDS to reduce perceived stigma and increase disclosure rate.

Keywords: Perceived stigma, HIV status disclosure, Young people

Word count: 482

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CHAPTER ONE

INTRODUCTION

1.1 Background

Human immunodeficiency virus (HIV) infection and Acquired Immune Deficiency Syndrome (AIDS) epidemic is a serious health and developmental problems in many countries around the world (WHO, 2009). It is generally regarded as the major health crisis of the 21st century and one of the terrible epidemics in human history (Maliki et al., 2006). About 35 million AIDS death have been recorded at the end of 2015 (UNAIDS, 2016).

A report of Global AIDS epidemic as released by d World Health Organization (WHO) in 2015 put the global burden of HIV infection at 36.7 million, with the Sub-Saharan Africa being the worst hit with 22 million people living with HIV (PLHA). In sub Saharan Africa, Nigeria ranks second among countries with the heaviest burden of HIV/AIDS; young people remain disproportionally affected by the scourge in spite of all the efforts to halt the spread of the disease in the country.

Over a quarter of the Nigeria population is made up of young people aged 10-24years, broken down in to young adolescent (10-14 years), older adolescents (15-19years) and young adults (20-24 years) (UNICEF, 2011). The prevalence of HIV/AIDS varies among young people based on the various sub age groups that constitute this group of people. In 2007, prevalences of 2.9% and 3.2% were recorded among age groups 15-19 and 20-24 respectively (NARHS 2012) while in 2010, 3% was reported for age group 15-19 years old and 4.6% for those within 20-24years age group (HSS 2010) The trend in prevalence among young women attending Antenatal care (ANC) revealed that HIV prevalence among young women age 15-24 years old attending antenatal care has decrease from 6% in 2001 to 4.1% in 2010, however, this category of people

still carry more of the HIV/AIDS burden in the country with more than half of all new infections occurring among young people (NACA 2011).

In response to the HIV/AIDS epidemic, Nigeria adopted a multi-sectoral approach which is made up of one coordinating body (NACA) and other partners including the private sector, civil society organizations, networks as well as bilateral (The United State President's Emergency Plan for AIDS Relief) and multinational (UN agencies) organisations. With the effort of some of these partners, policies were formulated and strategic plans developed as well as guidelines to direct programmatic interventions (FMOH 2008). Currently, interventions that are rapidly expanding include HCT, ART and PMTCT (NACA 2014).

HIV/AIDS related stigma and discrimination is a major factor impeding effective HIV/AIDS response among young people. In Sub-Saharan Africa, HIV/AIDS epidemics vary from country to country with most countries in Southern Africa such as Botswana, Lesotho, Namibia, South Africa, Swaziland, Zambia and Zimbabwe having prevalence rate exceeding 15 (UNAIDS, 2008). Although HIV/AIDS is prevalent in all population groups, data from most countries suggest that it is more pronounced among those who are within the reproductive and productive age group. For example, UNAIDS estimates suggest that over half of new HIV infections are occurring among young people (15-24 year olds) (UNAIDS 2004). Also, the Joint United Nations Programme on AIDS (UNAIDS) reported that the rate of newly acquired HIV infections are the highest in the 15-25 years age- group and that this group accounts for about 60.0% of the global total of HIV infected persons (UNAIDS, 2006). In Nigeria, prevalence of HIV/AIDS is predominating among young people aged 20-29 years old (UNICEF, 2007).

Disclosure is a major step in curbing the spread of HIV, however, Stigma and discrimination discourages infected individuals from disclosing their status, accessing treatment and living positive lives. Although it is generally accepted that the prevalence of HIV/AIDS in Nigeria is

relatively low (ranges between 3.1 and 4.6%) compared to the rest of sub-Saharan Africa (FMoH, 2008; UNAID, 2008), Nigeria's large population size means a significantly high number of people are infected. In fact, HIV has been reported among a broad spectrum of the Nigerian population including healthy persons, blood donors, clients of Sexually Transmitted Diseases (STDs) clinics, tuberculosis patient, long distance truck drivers, pregnant women attending antenatal clinics, Commercial Sex Workers (CSWs) and their clients, clinically ill and healthy persons, infants and youths (FMoH, 2001., Laah, 2003., Mamman, 2003).

1.2 Problem Statement

The proportion of HIV-infected individuals accessing antiretroviral therapy (ART) has dramatically increased as the ART rollout has progressed in sub-Saharan Africa (UNAIDS, 2014). Yet only half of people living with HIV/AIDS (PLWHA) regionally are aware of their status, and PLWHA find disclosing their status, a complex decision-making process and challenging (Greeff et al., 2010). Concealment or nondisclosure of HIV-positivity may expose HIV-negative partners to infection, increase reinfection among HIV-positive partners, and create missed opportunities for HIV care (King et al., 2008). For example, Simbayi et al found a close association between having not disclosed HIV status to sex partners and engaging in practices with high risk of HIV transmission in PLWHA in South Africa (Titilope et al., 2011).

In some countries, non disclosure of HIV status has been taken as a serious problem and then nondisclosure has been described legally as fraud, criminal negligence, criminal nuisance, and many other charges in additional jurisdictions (Worth et al., 2008). Across many countries, nondisclosure rate remains high and this poses a high level of risk of transmission of HIV. For instance, in a study conducted in two United States cities, Stein MD et al found high rates of non disclosure and the low rates of condom use, and concluded that sexual partners of HIV-infected persons continue to be at high risk for HIV transmission (Titilope et al., 2011). In Tanzania, a

study reported that 34% of married women disclosed the information to their husbands (Lugalla et al., 2011). Another study undertaken in Dar es Salaam reported that rates of disclosure were only 16.7% among sero-positive women who revealed their status to their sexual partners (Kilewo et al., 2001).

Based on preconceived notions regarding HIV-positive persons, stigmatization may have an impact on disclosure decisions. Disclosure is intimately related to how communities stigmatize or accept HIV and how individuals perceive themselves, their identities, and their roles within the community. Disclosing one's status almost always has some risk attached to it. There might be rejection by friends or family member, or might suspect discomfort from them when they find out about one's status. Negative experiences like rejection, and sometimes even physical abuse, contribute to one's perception about the social environment's views on HIV. Perceived stigma may lead to various outcomes, including negative changes in self-concept and emotional reactions toward those who may invoke the stigma (Driskell et al., 2008). According to UNAIDS 2016 report, more 10% of PLWHA reported denial to health care in HIV stigma index surveys conducted across the globe. Similarly, in a survey carried out in South Africa, 43% of PLWHA experienced internalized stigma with 29% feeling ashamed and 28% having feeling of guilt (SANAC, 2015). In the HIV stigma index carried out among PLWHA in Nigeria, 53% reported low self esteem, 44% felt guilty and 50% blame self for their HIV status (NEPWHAN, 2011).

Furthermore, perceived stigma has also been found to be related to HIV status disclosure. Disclosure to others, lovers, family or friends, has been shown to be a potent stressor, as individuals living with HIV/AIDS might fear negative reactions such as blame, rejection or violence (Titilope et al., 2011). Fear of being a burden to the immediate family, or stigma associated with HIV infection, might force persons living with HIV/AIDS (PLWHA) to keep their disease secret from their social network or facilitate nondisclosure (Titilope et al., 2011).

Having good access to care is imperative for maintaining the health, well being, and quality of life of persons living with HIV/AIDS (PLWHAs). Perceived stigma in clinical settings may discourage HIV-infected individuals from accessing needed health care services. In the baseline of an intervention study, perceived stigma was found to be associated with low access to care or treatment suggesting that perceived can potentially influence HIV treatment (Janni et al., 2007). Also in HIV stigma index survey carried out in Nigeria, 35% PLWHA avoid clinics because of perceived stigma (NEPHWAN, 2011). This is a serious problem because lack of access or delayed access to care may result in clinical presentation at more advanced stages of HIV disease. Furthermore, PLWHA who experience greater stigmatization might perceive more difficulty accessing care because fear of rejection and consequences of stigma may lead them to perceive the health care setting as intolerant and inaccessible (Sayles et al., 2009). Previous studies have described an association between stigma and low levels of antiretroviral therapy (ART) adherence.

In order to address these problems, interventions are needed to address nondisclosure of HIV sero positivity and perceived stigma most especially factors that have been found to influence them.

1.3 Justification

The reluctance of young people in need of health services from seeking quality health services thereby undermining efforts aimed at prevention of infection by HIV are attributable to HIV related stigma and discrimination. This has heightened the state of fear, thereby preventing people from looking out for information on how to reduce their risk of exposure to HIV, adopt safer behaviors and find out whether or not they are infected. The fear of stigma and discrimination also discourages PLHIV from disclosing their status, even to family members, and undermines their ability to adhere to treatment (UNAIDS, 2012).

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Findings from this study will therefore provide reliable and comprehensive information on the characteristics, of young people living with HIV/AIDS including their perception of stigma and factors influencing disclosure of HIV seropositive status, which will help inform evidence based policy decision as well as facilitate comprehensive intervention programs to meet the needs this age range of young people living with HIV /AIDS.

1.4 Research Questions

i. What are the socio-demographic characteristics HIV positive young people receiving HIV/AIDS treatment and care at the University of Teaching Hospital, Gwagwalada?

ii. What proportion of young people living with HIV/AIDS has disclosed their HIV status?

iii. What are the factors associated with disclosure of HIV status?

iv. What is the perception of HIV positive young people towards stigma and discrimination?

v. What are the factors associated with perceived HIV stigma?

1.5 Objectives of the study

1.5.1 Broad Objectives

To describe the socio-demographic profile, perception of stigma and disclosure of status of HIV positive young people receiving HIV/AIDS treatment and care at the University of Abuja Teaching Hospital Gwagwalada.

1.5.2 Specific Objectives

(i.) To describe the socio-demographic characteristics of HIV seropositive young people receiving HIV/AIDS treatment and care at the University of Abuja Teaching Hospital, Gwagwalada.

(ii.) To determine the proportion of young people that disclose their HIV seropositive status among the study population

(iii.) To identify factors associated with disclosure of HIV seropositive status.

(iv.) To assess the perception of HIV positive young people to HIV/AIDS stigma and discrimination.

(v.) To identify factors associated with perceived HIV stigma.

CHAPTER TWO

LITERATURE REVIEW

2.1 History of HIV/AIDS in Nigeria

For a long period of time, Nigerians viewed AIDS as a scourge alien to us. As a matter of fact, it was thought to be some product of imaginations of some scientists. Though ranked second among sub-Saharan African nations in the number of HIV-infected adults, it is one of the most affected countries in the world (UNAIDS, 2004).

In 1985, the first two AIDS cases were diagnosed in Lagos. This was subsequently reported at the International AIDS conference that took place in 1986 (Nasidi et al., 1986). FMOH did set up the National Expert Advisory Committee on AIDS (NEACA). NEACA recommended the development of a short-term plan to combat the spread of the virus. The FMOH, with the assistance of WHO in consonance with NEACA implemented the comprehensive medium-Term Plan for the nation's battle against HIV/AIDS (NACA 2014). In 1987, with assistance of the World Health Organization (WHO), the government through its proactive actions nine HIV testing centers in the country. This helped in the diagnoses of other AIDS cases as well as from healthy blood donors. In 1988, the National AIDS Control Program replaced NEACA. The program was expanded in 1991 to include sexually transmitted infections (STIs) and renamed the National AIDS and STDS Control Program (NASCP). NASCP focused primarily on health sector responses to HIV and other STIs. It developed guidelines on key interventions which included syndromic management of STIs, voluntary counseling and testing (VCT), prevention of mother-to-child transmission of HIV (PMTCT), and management of HIV/AIDS, including treatment of opportunistic infections, administration of antiretroviral (ARVs), and home-based care. It also supported monitoring and surveillance of the epidemic (Nasidi and Harry 2006).

The advent of the democratic government heralded a concerted effort to tackle the epidemic. The government of that era did placed high priority on HIV prevention, treatment, care, and support activities both in Nigeria and in the International community.

NASCP was replaced with a broader AIDS control program, which included the Presidential Committee on AIDS and multisectoral National Action Committee on AIDS (NACA). This initiative was subsequently adopted by states through the state action committee on AIDS (SACAs) and to local district level through the local action committee on AIDS (LACAs).

NACA was charged with developing policies for the prevention and control of HIV/AIDS with a mandate which includes developing effective multi-sectoral response strategies nationwide (FMOH, 2001). NACA developed the first multi-sectoral medium-term plan of action, the HIV/AIDS Emergency Action Plan (HEAP) in 2001(NSP, 2010).

The action plan had two main components: to break down barriers to HIV prevention at the community level and support community based responses, and to provide prevention, care, and support interventions directly. In 2004, HEAP was replaced with National HIV/AIDS Strategic Framework (2005-2009) to tackle the huge gaps noticed in HIV prevention, treatment, and care services, particularly at the community level (Nasidi and Harry 2006, NSP 2010).

Nigeria is multiethnic society with diverse religious and cultural settings. Development is complicated by the poor economic status of the country, which places Nigeria with a human development index of 152 out of 175, inevitably positioning Nigeria among the 25 poorest countries in the world (UNDP, 2004)). Nigeria has been undergoing a demographic transition from high-fertility, high mortality population to a low fertility declining mortality one. The base of a population pyramid is wide because of the large number of people younger than 15. The median age of the population is 17 years and the 15-24 year age group constitutes about 20% of the population, with a 1:1 male-to-female ratio.

HIV/AIDS is a major issue of concern for children, young people and women in Nigeria with a prevalence rate of 3.4 per cent in 2012 (NARHS 2012). An estimated 3.4 million people are living with the virus (UNAIDS 2014), which makes Nigeria the third worst affected country in the world. The prevalence rate is highest among young people: 4.7%nof 20-24 year-olds and 4.9% of 25-29 year-olds are infected with the HIV virus. About 4.4% of women attending antenatal clinics are infected with HIV. An increasing number of children are infected with the virus, through mother-to-child-transmission. Yet less than 1% of pregnant mothers have access to counseling and testing services for HIV in Nigeria. According to UNAIDS latest estimates, about 240,000 children are living with HIV-AIDS in Nigeria. In addition, 930,000 children are orphaned by AIDS.

HIV can be transmitted via sexual contact with an infected person and by blood or body fluid exchange (which could be through contaminated needles, blood transfusions of infected blood, or blood clotting factors). Heterosexual transmission accounts for about 80% of all HIV infection in Africa. In Nigeria, the heterosexual route of infection accounts for over 80% of all transmission (Nasidi and Harry, 2006; NSP 2010).

2.2 Prevalence of HIV/AIDS and burden of new infections

HIV continues to be a major global public health issue, having claimed more than 39 million lives so far. Globally, an estimated 35.0 million people were living with HIV, and 3.2 million of these were children and 1.5 million people died from HIV-related causes in 2013. The vast majority of people living with HIV are in low- and middle-income countries. An estimated 2.3 million people were newly infected with the virus in 2012 (UNAIDS 2013). There is no cure for HIV infection. However, effective treatment with antiretroviral drugs can control the virus so that people with HIV can enjoy healthy and productive lives (WHO, 2013). In 2013, 12.9 million people living with HIV were receiving antiretroviral therapy (ART) globally, of which

11.7 million were receiving ART in low- and middle-income countries. The 11.7 million people on ART represent 36% of the 32.6 million people living with HIV in low- and middle-income countries (WHO, 2013).

No other region has seen more devastation by the HIV/AIDS epidemic other than sub-Saharan Africa. A report shows that at the end of 2013, 1.5 million people in the region had died of AIDS-related illnesses (UNAIDS, 2014).

Studies have shown that 5-10 million young people between the age brackets of 15-24 are living with the HIV; accounting for about 41% of all new HIV infections globally(UNAIDS, 2010). The implication is that 890,000 acquire HIV each year, which amounts to 2500 young people getting infected by HIV on a daily basis (UNAIDS, 2010). In fact, one in 14 young adults are living with the virus.

The United Nations Children Funds (2011), reports that about 95% of all new infections occur in less developed countries. In sub-Saharan Africa the worst hit zone, nearly 3.8 million youth are living with the HIV/AIDS (UNICEF, 2011). This figure represents 76% of the world's HIV positive youth (UNICEF, 2011). In 2003, studies buttressed the fact that half of the new infections of the 3.0-3.4 million new cases of HIV infection occurred in this region ( ). It is estimated that that 60% of all new HIV infections in Sub-Saharan Africa occur among young people aged 10-24 years of age (Mass and Otte, 2009).

The estimated number of cases of HIV/AIDS, which reflects both prevalence and population size, also varies between countries. South Africa, with a high prevalence, has the largest number of cases of HIV/AIDS among adolescents (1.3-1.9million). In the other hand, Nigeria as a case study has a relatively low prevalence, but the second highest number of cases among youth (838,000-1.3million) and people living with HIV/AIDS; this is because it has a high population (). Reports from the United States Agency for International Development (USAID, 2010) have

suggested that regional variations exist between states in Nigeria. An example is the case of Benue (10.6%) in the north central part of Nigeria having higher prevalence rates than Ekiti state (1%) in the south western part of Nigeria. Nigeria bears about 8% of the global and 10% of Africa's HIV/AIDS burden (Okojie and Wagbatsoma, 2006).

2.3 HIV/AIDS in young people

The global impact of HIV/AIDS on the youth is alarming. It is reported that the current impact is expected to worsen, with the projected numbers of people living with HIV/AIDS in hard hit countries rising steadily over the next two decades (US census Bureau, 2002).

It is estimated that 35-40 million people are living with the disease worldwide. Young people between the ages of 15-24 represent almost a third of this aforementioned figure of people living with the HIV/AIDS (UNAIDS, 2001). It is also reported that of the 5 million people newly infected with HIV in 2001, almost 6 in 10 were under the age of 25. Young people age 15-24 accounts for half of all new infections among adults ages 15-49. This amounts to almost 6,000 infections per day among 15-24 year olds, or approximately one every 15 seconds (Piot, 2002).

Research data shows that in North America and in the Middle East for example, over 94,000 young people are living with the virus (UNICEF, 2011). In Latin America and the Caribbean, about 250,000 young people are living with HIV (UNICEF, 2011). The Caribbean has a higher HIV prevalence rate (the percentage of the population living with HIV) than any besides sub-Saharan Africa. The Caribbean is also the only region outside of sub-Saharan Africa where women and girls outnumber men and boys living with HIV, while in Latin America, the epidemic is concentrated among men who have sex with men (UNAIDS, 2010). In central and eastern Europe, Ukraine and Russian federation account for almost 90% of new infections (UNAIDS, 2010). It is also reported in South Asia and East Asia, well over 500,000 young

people are living with HIV. These regions account for ten percent of all new HIV infections among young people (UNICEF, 2011).

In countries with very young population it is reported that there is a high rate of HIV infection. Over half the population of sub-Saharan Africa, for example, is estimated to be under 18 (with one in four between 10 and 19 (Population Reference Bureau, 2000). 77% of young people living with HIV/AIDS live in sub-Saharan Africa (UNICEF, 2000). Over 90% of the world's AIDS orphans live in sub-Saharan Africa (Hunter and Williamson, 2000). This interjection of high HIV/AIDS prevalence and disproportionately young populations results in a concentration of new infections among youth. However, in the developed world only over 150,000 young people are living with HIV or AIDS representing 8% as against 20% of young people in low income countries (UNICEF, 2010).

The vulnerability of the youth to high risk of HIV/AIDS infection can be attributed to various factors. Behavioral, physiological and sociological factors make young people more vulnerable than adults to contracting HIV. Naturally, adolescence is a period when young people explore and take risks in many aspects of their lives, this includes sexual relationships. Adolescents most especially those of school age are identified as the group at highest risk of acquiring the infection since they are sexually active, take greater risks and believe in their invulnerability (Akpabio et al., 2009).

It is known that young adolescent are sexually active before the age of 15. Recent surveys reveal that boys aged 15-19 in Brazil, Hungary and Kenya reported having sex before they were 15. Another study in Bangladesh found that 88% of unmarried urban boys and 35% urban girls had engaged in sexual activity by the time they were 18 (UNICEF, 2002). Usually, sexually active youth change partners frequently having more than one partner in the same period engaging in unprotected sex. These risky behavior by adolescents coupled with the fact that these young

people who are HIV-positive probably became infected quite recently and therefore likely to be highly infectious; as a result, they pose a very high risk to their sexual partners (UNICEF, 2002). The social stigma and violence visited on those identified as homosexual can magnify the risks of contracting HIV, as they may hide their sexuality and consequently do not have access to the information they need. Some young men who engage in sexual relations with other males may not identify themselves as homosexual or may have experimental and temporary homosexual experiences, without protecting themselves from unsafe behaviours that put them at risk for HIV. Young women in Sub-Saharan Africa are at much greater risk of contracting HIV than young men. In sub-Saharan Africa, women and girls far outnumber men and boys living with HIV. In fact studies have shown that 72% of young people living with HIV in sub-Saharan Africa (over 2.7million) are young women (UNICEF, 2011). The factors influencing this trend are multi faceted. Child and adolescent marriage is an important factor in the HIV/AIDS epidemic. It is noted that for married girls at the risk of HIV, age difference between the men and their wives is a significant HIV risk factor. This can be buttressed by the study in Kisumu, Kenya, where it was reported that as many as half of the women with husbands at least a decade older were infected with HIV; by contrast, no women were infected whose husbands were only three years older or less (UNICEF, 2002). Another study of nearly 400 women attending the city's STI clinic in Pune, India, found 25 per cent infected with STIs and 14 per cent positive for HIV; 93 per cent of these women were married, and 91 per cent had never had sex with anyone but their husbands (UNICEF, 2002). These older husbands may have likely had several previous partners and may have a sexually transmitted infection (STI), including HIV, which may be transmitted to their young wives. Given these known patterns, marriage in Sub-Saharan Africa may actually increase adolescent women's risk of contracting HIV.

On the rise are reported cases of sexual abuse. However, most cases go unreported. Abusers are unlikely to use a condom and the cuts and tears that result from forced sex increase the likelihood of HIV infection. A 1998 study in Botswana shows that over two fifths of all rape cases reaching the courts involved children under the age of 16; 58 per cent were between the ages of 11 and 20. In KwaZulu Natal, South Africa, 10 per cent of adolescent girls reported their first sexual experience as forced or rape. Surveys from nine Caribbean countries found that 48 per cent of adolescent girls who had had intercourse reported that their first sexual intercourse had been forced. It is pertinent to note that abusers are not always strangers as trusted family members, friends, workers may just be the perpetrators.

The lack of sexual education amongst adolescent is a factor that influences the prevalence of HIV/AIDS. Young people lack the basic knowledge of protective measures from getting infected with HIV (UNAIDS, 2010). A systematic review (Okudo and Ross, 2015) did suggest lack of adequate knowledge as a major reason for high risk heterosexual behavior and that in Nigeria the most common mode of transmission of HIV is via sexual transmission. Young women are known to have displayed lower levels of HIV knowledge. The reasons for this postulation emanates from the fact that although most countries around the world included HIV education at the secondary school, the situation is quite different for most poor countries were most young women are out of school.

Reproductive health services are rarely geared towards the needs of adolescents. Generally, in Sub-Saharan Africa and other regions in the developing world, young people's health needs receive little or no attention. The high cost of accessing or obtaining health service information and care they need to have safe relationships is a key factor influencing the high prevalence of HIV/AIDS.

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Young women are known to be physiologically more vulnerable to infection than older women because changes in the reproductive tract during puberty make the vagina and cervix of adolescents less resistant to infection.

2.4 Stigma and Discrimination of persons living with HIV/AIDS

Stigma and discrimination are central to the challenges of the global AIDS response and main social barriers hindering the response in Egypt. HIV related stigma encompasses the negative attitudes PLHIV faced by rooted misconceptions. HIV related stigma and discrimination result in poor quality of care for PLHIV, frighten away potential clients in need of health service from seeking services and undermine prevention efforts by making people afraid to seek out information about how to reduce their risk of exposure to HIV, and to adopt safer behaviors and find out whether or not they are infected. The fear of stigma and discrimination also discourages PLHIV from disclosing their status, even to family members and PLHIV, and undermines their ability to adhere to treatment (UNAIDS, 2015).

Stigma can be defined as a disgrace or a reproach attached to something. It is often described as a negative tag or nomenclature when talking about somebody or something. Treating someone in a different, unjust, unfair or prejudicial way, on the basis of their actual or perceived belonging to a particular group constitutes what can be described as discrimination. UNAIDS (2007), describes discrimination as "enacted stigma" or the negative acts of exclusion or abuse that result from stigma which serve to devalue and reduce the life chances of the stigmatized on the basis that it consists of actions or omissions that are a result of stigma and directed towards those individuals who are stigmatized. Stigma has also been described as an enduring condition, status, or attribute that is negatively valued by a society and whose possession consequently discredits and disadvantages an individual (Herek, 2002).

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Goff man (1959, 1963) defines stigma as "undesired differentness" or "spoiled identity" and describes a negative moral or judgmental definition of a person or social situation often connected to discredit, disgrace, blame and ascription of responsibility for the condition. Lichtenstein (2003) describes stigma as a discrediting social label that changes the way an individual looks at himself/herself and disqualifies them from full social acceptance.

Link and Phelan (2006), proposed the first three components of stigma with close relations to labeling, devaluing and isolation of people living with HIV/AIDS (PLWHA). It also does encompass items on the shame of PLWHA, blame for the responsibility for HIV infection on the HIV-positive individual and positive and negative feelings about PLWHA. These three components by Link and Phelan (2006) are internalized stigma, disclosure stigma and negative image stigma. In another study, Berger (2001) as quoted in UNAIDS (2008), conducted a psychometric assessment of a HIV stigma scale and four forms of stigma emerged. These are personalized or internalized stigma, disclosure concerns, negative self-image and concerns with public attitudes towards people living with HIV infection. Lichtenstein (2003) and Bunn et al., (2007) identified the same four forms of stigma, but described them as four domains of stigma experiences.

Personalized HIV-related stigma is that stigma that internalized stigma effect on PLWHA. It's a stigma that invades their self-perception and sense of identity, impacting seriously on the person's perceptions and how they interact with the world. Studies has shown that people with HIV feel isolated, guilty, dirty and full of shame. This is often incorporated into identity (NACA, 2004).

Disclosure stigma experience is related to the concern to control information, keeping one's HIV status secret, or worrying that those who know about the HIV status will tell others. UNAIDS (2006) describes disclosure concern form of stigma as a form of stigma that drives HIV out of

the public sight, so reducing the pressure for behaviors change. This form of stigma also introduces a desire not to know one's own status, thus delaying testing and access to treatment.

Public attitude stigma experience is a form of stigma experience that refers to what most people think about a person with HIV or what 'most people' with HIV can expect when others learn they have HIV infection (Berger, 2007). Denying the rights of people with HIV/AIDS limits their ability to care for themselves and their families and makes them more vulnerable to infection and susceptible to stigma. Paxton (2005) on his thoughts on people's attitudes, described stigmatization as cruel social processes that offer some feeling of protection to the powerful, while increasing the load on the individual or group who is victimized in the process.

Negative self-image refers to feeling unclean, not as good as others or bad as a person, because of being HIV-infected (Lichtenstein, 2003). HIV stigma comes from the powerful combination of shame and fear. Shame because sex being a source of transmission, is surrounded by taboo and moral judgment; fear because AIDS is relatively fearful and deadly. The only way of making progress against the epidemic is to replace shame with solidarity and fear with hope (Bunn et al., 2007).

About 60% of all the new HIV infections worldwide are among people between 15-24 years old and they are highly vulnerable to acquire HIV and other sexually transmitted infections (Yahaya et al., 2010). According to Fielden et al. (2011), adolescents are a vulnerable group of population that are most affected by HIV/AIDS related stigma. It is particularly harmful to adolescents because of their stages of development in life. Acceptance and encouragement by others are very important during the transition into adulthood (Fielden et al., 2011). Swendenman (2006) outlined the key features of HIV/AIDS which render it a highly stigmatized illness. It includes:

- The means of transmission are negatively sanctioned social behaviors including male-to-male sex, injection drug use, having high number of sex partners (Crawford, 1996; Diaz and Ajala, 2001; Novick, 1997).
- Transmission behaviors are typically perceived to be voluntary and avoidable implying that infected persons are responsible for their illness e.g. victim blaming.

Research have shown that AIDS stigma can have a variety of negative effects on HIV test-seeking behaviour, willingness to disclose HIV status, quality of health care and social support (Boyd, Simpson, Hart et al; 1999). Many young people living with HIV manage multiple stigmas including those associated with poverty, social inequality, racism and social orientation (Rao et al; 2007). For example in a qualitative interview study of 34 HIV positive youth ages 12 to 24, many described social and structural limitations as barriers to their full participation in society (Flicker et al., 2005). Stigma was cited as a major barrier to societal participation; many youths shared painful stories of harassment, discrimination and cruelty upon disclosure of their HIV status to a loved one or person in authority like a boss or a teacher.

Fear of disclosure was so great in the sample that it kept many from participating in activities, finishing school, finishing or maintaining employment or building close social networks (Flicker et al; 2005). In one survey of enacted and perceived HIV stigma among 147 predominantly African-American and Latino youth in Los Angeles, San Francisco and New York City, almost all (89%) reported perceived stigma and 31% reported enacted experiences in the past three months (Swenderman et al., 2006).

The perceived stigma measures how often the respondent felt blamed or ashamed or avoided or feared losing family and friends because you are HIV positive during the last three months while enacted stigma items include being hassled or threatened or physically abused or losing a friend because you are HIV positive. A lower proportion of family and friends knowing HIV sero-

status was associated with overall perceived stigma (Swenderman et al; 2006). A study by Rydstrom et al., (2012), shows that young people in Sweden living with HIV protect themselves from the risk of being stigmatized by hiding their HIV status, declaring it only in health care situations. Among friends and in school, they pretend to be as healthy as others. They also want to protect their siblings from stigma and the topic HIV was often a taboo even in the family. To live with HIV was described as living with a dark secret and the participants used the silence as a strategy to conceal their HIV status (Rydstrom et al., 2012).

Several authors opined that lack of knowledge about HIV/AIDS might be an underlying factor to stigma and discrimination (Mawar et al., 2005; Thi et al., 2008; Nachenga et al., 2012). Gomez-Bustamante and Cogollo-Milanes (2011) reported that about 10% of the 2625 high school students in a large city in Columbia had enough knowledge about HIV/AIDS. It was also shown that being a student in a private school combined with increased age were factors associated to better knowledge about HIV/AIDS.

In a global cross-sectional study of perceived HIV-related stigma among people living with HIV made in 2012, 37% of the 2035 participants reported loneliness and social isolation as a result of their HIV-status. About 27% of the participants who reported symptoms of depression and the reported factors were living in North America versus other regions, not belonging to a support group, being unemployed and not disclosing HIV-status to anyone. About 78% of the participants reported experiences of stigma related to their HIV status. The most commonly reported stigma by 47% of the participants was that people believe that people living with HIV engage in risky behaviour, such as sexual promiscuity, drug use and prostitution.

The stigma affecting the participants mostly was social avoidance and beside that others' false perceptions of modes of HIV transmission (Nachenga et al; 2012). A qualitative study of stigma and discrimination against people living with HIV in Ho Chi Minh city in Vietnam by Thi et al.,

(2008), shows that nearly all of the 53 participants had experienced some form of stigma and discrimination. For an example, in a qualitative study of experiences of HIV-related stigma, Bogart et al., (2008), found that many young people reported that family members had disposed of eating utensils for fear of contracting HIV. These behaviours were hurtful and especially damaging because they were enacted by family members who are expected to show love and support. For young men who have sex with men, the HIV-related stigma is one or more layer of stigma on top of the discrimination and prejudice that they already experience for being sexual minorities (Swendeman et al., 2006).

Using focus groups with adolescents with HIV, Rao et al., (2007) discovered that stigma actually plays a key role in presently adolescents from taking their highly active antiretroviral therapy (HAART) medications. In fact 50% of adolescents interviewed directly stated they avoided taking their medications for stigma-related reasons.

2.5 Stigmatization and discrimination of people living with HIV/AIDS in Nigeria

It is estimated that about 3.6% of Nigerian adults aged within the ages 15-49 are living with HIV/AIDS. In 2002, Nigeria started the antiretroviral treatment programme, with a target to reach well over 10,000 adults and 5,000 children with antiretroviral therapy (ART) within one year. The programme did suffer some set back due mainly to massive over recruitment of patients. The resultant effect was an expanded waiting list and not enough drugs to supply the rather high demand. Patients had to wait for long periods for more drugs, invariably undoing the benefits and improvement gained over time. This predisposes a risk of ART drug resistance. Although, there was some response from the government by the purchase of drugs worth over US$3.8 for the resurgence of the programme; this was a far cry for the estimated 550,000 people requiring ART. However, there was a treatment scale-up between 2006 and 2007 which saw an impressive rising from 81,000 people (15% of those in need) to about 360,000 (26%) as of

December 2010. It is reported that despite the progress, Nigeria still has a long way to go in providing universal access to HIV treatment, care and support. There are currently an estimated 1.4 million people, including 262,000 children, needing access to ART.

HIV-related stigma and discrimination are prevalent in Nigeria, however, apart from the news or media reporting, the experiences of stigma faced by HIV and AIDS persons in Nigeria have not really been properly investigated through scientific researches (Ajuwon, 2011). The HIV and AIDS related (published) studies done in Nigeria mainly focused on knowledge, prevalence and reviews on discriminations. As reported from a 2004 pilot study by Okemgbo and Odimegwu (2004) on stigma in Nigeria, it was found that 44.5% of respondents would not care for a family member with HIV; 58.2% would not want or allow someone with HIV to continue working in a factory; and 67.5% would withdraw from a school with an HIV-positive student. The study further revealed that 13.2% thought people with AIDS should receive less treatment in a general hospital, and 10% felt that AIDS patients should not receive any treatment at all in any hospital. More than half would not want to work with, kiss or hug someone with HIV, while about three quarters of the respondents would stop buying from a shopkeeper or food seller who has AIDS.

A study among HIV positive men and woman in the United States showed that stigma was associated with depressive symptoms, receiving recent psychiatric care, and greater HIV-related symptoms. Stigma was also associated with poorer adherence and more frequent serostatus disclosure to people other than sexual partners, but showed no association to sexual risk behavior (Vanable et al., 2006). Another study conducted in Mozambique among HIV positive persons who were on an antiretroviral therapy (ART) regimens for a full year examined psychosocial factors (disclosure decisions, perceived social support, and depression) associated with stigma, at ART initiation and 1 year later. The study found that one year after initiating ART, participants reported no change in stigma, a decrease in perceived social support, and an increase in

depressive symptomology. Disclosing HIV status to friends was associated with lower levels of stigma (Pearson et al., 2009). These findings suggest that HIV care in comparable settings should include counselling, support groups, and peer support, that includes stigma and disclosure concerns prior to and following diagnosis. Most importantly, assessment and treatment of depression should be incorporated into ongoing HIV care.

2.6 Factors associated with stigma and discrimination attitude among hospital workers

HIV/AIDS- related stigma and discrimination attitude has accompanied the AIDS epidemic from the start and it can occur everywhere, but they may have more serious consequences in healthcare settings.

Access to appropriate treatment and care for individuals with HIV/AIDS is generally recognized as a fundamental human right; However, discrimination prevents individuals from getting tested and seeking or adhering to treatment and care due to the stigma associated with being HIV positive (CDC, 2010).

The healthcare sector is of paramount importance due to the role of health care workers (HCWs) in caring for HIV-positive patients. However, it has been consistently identified as a major source of stigma and discrimination. Recent studies on the obstacles to care for PLHA found that physicians and nurses were often reluctant to provide PLHA with health services due to their lack of knowledge about infection prevention; doubts as to the effectiveness of prevention measures; moral stigmas against illegitimate sex; fears of being stigmatized by the community; misconceptions about care and treatment of PLHA; and the generally negative connotations associated with HIV/AIDS (Ihab et al, 2013).

Stigma and discrimination are serious obstacles standing in the way of effective HIV/AIDS prevention and care (Kalichman, 2006). In order to combat HIV/AIDS related S&D, it is important to quantify them, to understand their magnitudes, to explore their associated factors

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and to explore how they vary across groups, settings and cultural contexts within a country (Ihab *et. al.*, 2013).

2.7 Disclosure among people living with HIV/AIDS

Infection with the human immunodeficiency virus (HIV) is a global pandemic and the commonest route of infection in the developing world especially in a country like Nigeria is mostly by heterosexual intercourse (Kristensen *et al.*, 2002). Sub-Saharan Africa has approximately 10% of the world's population.

Nigeria is reputed to have the second largest population of people living with HIV/AIDS (PLWHA) worldwide as well as HIV sero-prevalence of 4.6% (FMoH, 2008). Although the sero-prevalence rate of estimated population living with the HIV/AIDS has since dropped to about 3.6% (UNGASS, 2010); the size of Nigeria's population greatly magnifies the burden of infection in the populace. It is reported that Nigeria now has the highest number of new infections each year (WHO/UNAIDS, 2011).

A few studies have documented gender differences in HIV- positive disclosure rates to partners and the findings have been mixed. Some reported no gender differences as in the case in Ethiopia (Deribe, 2009) and Mali (Ndiaye, 2006). Also reported was a higher disclosure rates by HIV positive men (84%) than HIV positive women (78%) (Skogmar, 2006). Several other studies did report higher rates fo disclosure by women as in the case in Burkina Faso and Mali (Ndiaye, 2006), South Africa (Olley, 2004) and United States of America (Weinhardt, 2004).

Regardless of whether there were significant gender differences in disclosure rates, most studies documented substantial gender differences in the contexts of, barriers to and outcomes of disclosure. Some studies explored socio-demographic factors that influence disclosure, principally residence and ethnicity. For example, researches in South Africa found higher disclosure rates in urban settings than in the rural settings (Norman A, 2007). In the UK, studies

found that African men were less likely than were white men to disclose to their partners about their HIV infection status (66% vs. 86%) respectively (Elford et al., 2008). Similarly, a study in French Antilles and French Guyana found that non French citizens were less likely to disclose to a steady partner than were French citizens (Bouillon, 2007) and also studies in the US found that African Americans disclosed less often than did European Americans(Vance, 2006).

Such results suggest that individuals from racial/ethnic minority groups have greater concerns about stigmatization if they disclose their status. Socio-economic factors and access to resources also appear to play an important role. In the South African study mentioned earlier (Norman, 2007), urban communities with higher disclosure rates had more institutional sources of support, including NGOs and hospitals.

Research from Nigeria and among migrants from Africa in Sweden revealed that more educated respondents disclosed more often than did their less educated counterparts (Akani and Erhabor, 2008). Similarly a study from India found a higher rate of disclosure to partners by literate respondents compared with illiterate respondents (86% vs. 44%, respectively). Conversely low wage employment and economic vulnerability reduced disclosure by Tanzanian women (Antelman, 2001), Dominican male sex workers (Padilla, 2008) and Canadian female sex workers (Montaner, 2008).

Such results suggest that economic and social advantage make disclosure more difficult. Disclosure is not always voluntary, an issue rose primarily (though not exclusively) in studies conducted outside Europe and the United states. For example, In India, 35% of male and female respondents reported that their HIV status had been disclosed without consent and relatives sometimes found out a person's HIV status when it was disclosed in their presence by someone else (Mulye and Raja, 2005).

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Research has found large variations in the amount of information that people reveal. For example, only about half of respondents in a study from India disclosed the exact nature of their illness to those around them; others preferred partial disclosure or referred to less stigmatizing illness such as fever, heart problem or general illness. (Chandra, 2003). A US study reported that 54% of the respondents reported having received full disclosure. Among a sample of HIV positive pregnant youth in Tanzania, disclosure to a partner increased from 22% within 2 months of diagnosis to 40% after nearly 4 years (Antelman, 2001).

One study of adult women of three ethnic groups in the United States of America found no association between disclosure and depressed mood or health-related psychological distress except among Latinas, in whom a modest association was found (Corner et al; 2000).

In four studies of adults, disclosure was associated with higher levels of HIV stigma; women who disclosed to sexual partners reported negative experiences such as anger and blame, including one study where women reported that partners reacted with violence and terminated the relationship (Kilowoet et al., 2001). Small group discussions or group counseling supporting disclosure was shown in a trial of adolescents with HIV in the USA to significantly decrease the adolescents' report of unprotected sex, but there was no statistically significant difference in disclosure of HIV status to sexual partners (Rotheram- Borus et al; 2001).

In other studies in the USA, when small group discussions were used to support disclosure by parents with HIV (Rotheram- Borus et al; 2001), there was no significant increase in disclosure to their adolescent children, and the parents had significantly higher mean depression scores at three months (but no significant difference at 15 or 24 months). Adult MSM living with HIV were no more likely to disclose to a higher number of family members (statistically non-significant) than was the control group (Serovich et al; 2011).

Structured support groups or workshops in Africa were shown to significantly increase disclosure by pregnant women with HIV at two and eight months of follow-up; there was no statistically significant difference in reported depression (Mundell et al., 2011). Another study (Otis et al., 2012) found no significant difference one week after women with HIV participated in empowerment workshops to help them deal with the emotional consequences of keeping their HIV status a secret.

Recommendations for a public health approach and considerations for policy-makers and managers, One-on-one counselling significantly increased disclosure by mothers with HIV to their young children in one study (Murphy, 2011), but the quality of the evidence is very low.

Peer-led behavioural interventions were shown to significantly increase adult MSM's self-reported motivation to inform sexual partners (Wolitski et. al., 2005). Nine additional studies were included, but were not amenable to GRADE analysis because of inadequate data. One study was a disclosure-only intervention (Serovich et al., 2009); the remaining were more comprehensive interventions designed to address multiple issues relating to HIV infection, but included disclosure as part of the intervention.

2.8 Benefits of disclosure among people living with HIV/AIDS

One way to reduce the spread of HIV may be to encourage infected individuals to communicate their disease status to their sexual partners. Disclosure may reduce the transmission of HIV by raising awareness and decreasing risky behavior (WHO, 2004).

Disclosure to sexual partners was associated with increased frequency of condom use and reduced number of sexual partners; those who disclosed to HIV-negative partners were significantly less likely to engage in unprotected anal sex compared with those who did not disclose their HIV status (Crepas *et al.*, 2012).

Several studies among heterosexual men and women, young people and attendees of an outpatient HIV clinic found that disclosure had a positive association with the length of time. Overall, studies of adolescents have found that disclosure was associated with improved clinical outcomes as measured by increased CD4 cell counts (Sherman *et al.*, 2000) decreased number of partners (but not with decreases in unprotected sex) (Dempsey *et al*; 2012). Strachan et al; 2007 reported in their the association of disclosure with higher CD4 counts.

Disclosure was associated with better HIV testing and nevirapine adherence in the infants of mothers who disclosed their positive HIV status to their partners (Peltezer and Mlambo 2010), while nondisclosure was associated with suboptimal PMTCT outcomes (Jasserum et al; 2013).

Several studies of adults showed disclosure was associated with better linkage to care and ART adherence (Sayles and Beyene 2000).

CHAPTER THREE

METHODOLOGY

3.1 Study Area

The study was carried out at the Institute of Human Virology, Nigeria (IHVN) supported site, University of Abuja Teaching Hospital Gwagwalada, a tertiary health centre. University of Abuja Teaching Hospital is located in Gwagwalada, in the Federal Capital Territory of Nigeria. The hospital metamorphosed from a Specialist Hospital in 1982 under the Federal Capital Development Agency to Federal medical Centre in 1993. In September 2006, it was upgraded from Federal Medical Centre to a Teaching Hospital for the University of Abuja. The hospital which is managed by a eight member management committee has 29 departments, 350 bed spaces and offered services such as; in-patient and out-patient services; radiological and laboratory services and social welfare services. University of Abuja Teaching Hospital became a full fledged ACTION PlusUp site in 2005. The site is one of the 172 PEPFAR (US President's Emergency Plan for AIDS Relief) funded ACTION Plus Up sites in the Federal Capital Territory. It offers services such as HIV counseling and testing, prevention of mother to child transmission (PMTCT), antiretroviral therapy and treatment of opportunistic infections. Other ACTION Plus Up sites in the Federal Capital Territory include: National hospital, Abuja, General Hospital Nyanya and Primary Health centre, Kabusa.

3.2 Study Design

The study was a cross-sectional study among young persons living with HIV/AIDS using both quantitative (interviewer administered questionnaire) and qualitative (focus group discussion) methods.

3.3 Study Population

Study participants were HIV seropositive young people aged 15-24 years receiving ART

treatment and/or care at the University of Abuja Teaching Hospital, Gwagwalada.

3.3.1 Inclusion criterion:

I. Young people aged 15-24 years living with HIV/AIDS

3.4 Sample Size

Determination of sample size was calculated using the formula for sample size determination for single proportion

$$n = \frac{Z^2 (pq)}{d^2}$$

Where

n = minimum sample size required

p = 89%. Proportion of PLHIV that disclosed in a study by AS Sagay et al 2006

q = 1-p

d = Desired precision at 5%

z = Value of standard normal deviation at 95% CI=1.96

n = 150

Adjusting for none response (nr) rate of 10% = 1x N/ 1-nr

150/1-0.1

150/0.9

= 167

3.4.1 Sampling Technique

A total population survey of 230 consenting young people aged 15-24 years old receiving treatment/ care at University of Abuja Teaching Hospital was conducted.

3.5 Data Collection

Two data collection instruments were employed:

1. An interviewer administered semi structured questionnaire which consists of four sections:

I. **Section A:** Socio-demographic characteristics of respondents

II. **Section B:** Disclosure e.g. status of disclosure and reasons for disclosure,

III. **Section C:** Stigma scale consisting of 20 questions (Berger 2001) to assess feelings and opinions of people with HIV in relation to stigma

IV. **Section D:** Sexual characteristics and risk behavior of respondents such as sexual active status, age at first sexual intercourse, number of sexual partners, condom use e.t.c.

2. A Focus Group Discussion guide which consist of questions on disclosure of HIV status and stigma

For the interviewer administered questionnaire, the investigator and two trained data collectors were involved in data collection. The training for data collectors was conducted by the investigator over a 2-day period. Informed consent was obtained after detailed explanation of the study purpose to respondents and all information were obtained under anonymity. For the qualitative interview, two focus group discussions were conducted among the two age categories (15-19 years and 20-24 years). A total of 17 voluntary female young people participated in the focus group discussions.

3.6 Data Management and Analysis

3.6.1 Quantitative Data

3.6.1.1 Data Quality

All fieldwork was supervised. Completed questionnaires were checked daily for completeness and accuracy on the field

3.6.1.2 Data Analysis

Data entry and management was carried out using SSPS version 20. The main outcome variables

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Data entry and management was carried out using SSPS version 20. The main outcome variables

assessed were disclosure of HIV status and perceived stigma. The independent variables were socio-demographic characteristics, sexual characteristics and knowledge of HIV mode of transmission and prevention. Test of association between the dependent (Perceived stigma and HIV Status disclosure) and independent variables was carried out using Chi-square test. The independent variables that were significant at 20% were included into binary logistic regression to determine factors associated with disclosure of HIV status and perceived stigma

A four point likert scale; strongly agree, agree, strongly disagree and disagree was used to assess respondents' perception of HIV stigma. These were coded 1, 2. 3 and 4 respectively. There were 20 perception questions. The highest obtainable score was 80 and minimum 20. Respondents who scored ≥ 50 were regarded as having positive perception of HIV stigma.

Knowledge of HIV modes of transmission and prevention was assessed using 8 ponit scale with correct and incorrect responses assigned 1 and 0 point. Respondents who scored 8 were categorized as having good HIV knowledge.

3.6.2 Qualitative data

The qualitative analysis will be reported thematically using the following sub theme

- Opinion about stigma
- Opinion about disclosure

3.7 Ethical Considerations

Ethical approval (Appendix 2) was obtained from the University of Abuja Teaching Hospital Gwagwalada Ethics Review Committee before commencement of the study. Permission to carry out study was obtained from the head of the ART clinic after a detailed explanation of the purpose, objectives, procedure and methodology of the study. Written informed consent was also obtained from the study respondents who were aged 18 years and above, while for respondents below the age of 18 years assents were obtained as well as consent from their parents/guardians.

Participants were informed that participation in the study was voluntary and that they were free to withdraw at any point they feel uncomfortable with the questionnaire. Also names or personal identifiers were excluded from the questionnaires to ensure participants' confidentiality.

CHAPTER FOUR

RESULTS

4.1 Socio-Demographic Characteristics of Respondents

A total of 230 young people participated in the study. Response rate was 100%. The age range of the respondents was 15-24 years with the mean age of 20.2 ± 2.8 years. Respondents in the age group (20-24 years) were the highest amongst the population (59.6%) (Table 1). A larger proportion of the respondents were females (77.0%), while more than half of the respondents had secondary education (62.2%) (Table 1). Majority of the respondents were single (88.7%) with more than half of them being students (64.8%). Majority of the respondents lived with both parents (60.4%), while 10.0% lived with their mothers alone and 3.5% lived with their fathers. More than half of the respondents were Christians (68.7%).

Table 1: Socio-demographic Characteristics of Respondents

Socio- demographic characteristics	Frequency n (%)
Sex	
Male	53(23.0)
Female	177(77.0)
Age	
15-19	93(40.4)
20-24	137(59.6)
Level of Education	
No formal Education	23(10.0)
Primary	16(7.0)
Secondary	143(62.2)
Tertiary	48(20.9)
Religion	
Islam	70(30.4)
Christianity	158(68.7)
Traditional	2(0.9)
Marital Status	
Never married	204(88.7)
Currently married	22(9.6)
Separated	2(0.9)
Widowed	2(0.9)
Occupation	
Students	149(64.8)
Business/Trading	32(13.9)
Unemployed	24(10.4)
Others	25(10.9)
Person living with	
Self	7(3.0)
Father alone	8(3.5)
Mother alone	23(10.0)
Both parents	139(60.4)
Brother/Sister	14(6.1)
Other relatives	23(10.0)
Friend	1(0.4)
Spouse	15(6.5)

4.2: Background Characteristics of Respondents

Respondents from monogamous family were 70.1% as against those from the polygamous family 29.9%. Nearly half of the respondents had between 4 and 6 siblings (48.7%). Majority of the respondents had both parents alive (78.3%), while less than a quarter of the respondents had their mothers alive (13.9%) and 2.6% of the respondents had their parents both dead. A larger proportion of the respondents said their parents were still married (77.4%), 19.1% were widowed and 0.9% separated (Table 2). More than a third of respondents' parents had secondary education with the fathers recording 37.8% and mothers 37.0%. About 21% of respondent's fathers and 50.4% of their mothers were into business and trading (Table 2).

Table 2: Distribution of Background Characteristics of Respondents

Background characteristics	Frequency n (%)
Family type	
Monogamous	162(70.1)
Polygamous	68(29.9)
Siblings	
0-3	96(41.7)
4-6	112(48.7)
7-10	22(9.6)
Orphan Status	
Both Parents Dead	6(2.6)
Father Alone Alive	12(5.2)
Mother Alone Alive	32(13.9)
Both Parents Alive	180(78.3)
Parents Marital Status	
Currently married	176(77.4)
Separated	2(0.9)
Widowed	44(19.1)
Missing	6(2.6)
Father's Level of Education	
No formal Education	37(16.1)
Primary	28(12.2)
Secondary	87(37.8)
Tertiary	77(33.5)
Missing	1(0.4)
Mother's Level of Education	
No formal Education	46(20.0)
Primary	57(24.8)
Secondary	85(37.0)
Tertiary	42(18.3)
Father's Occupation	
Unemployed	19(8.3)
Business/Trading	48(20.9)
Civil Servant	47(20.4)
Farmer	36(15.7)
Others	22(9.6)
Missing	58(25.2)
Mother's occupation	
Unemployed	30(13.0)
Business/Trading	116(50.4)
Civil servant	27(11.7)
Others	17(7.4)
Missing	40(17.4)

4.3: Disclosure of HIV Status

More than half of the respondents (59.6%) said it is not advisable to disclose HIV status while 40.4% said it is advisable to disclose HIV status (Table 3). Less than half (42.2%) had disclosed HIV status while 57.8% had not disclosed their HIV status. Persons to whom they disclosed their HIV status to was highest amongst mothers (69.1%) followed by fathers (52.6%) while disclosing to their neighbors was the least (2.1%) (Table 3). About a third (34.0%) of the respondents revealed that reasons for disclosure was the need for support and need to start taking HIV treatment.

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Table 3: Disclosure of HIV status

Characteristics	Frequency n (%)
Advisable to disclose HIV status	
Yes	93(40.4)
No	137(59.6)
Disclosure of HIV status	
Yes	97(42.2)
No	133(57.8)
If yes, Person (s) disclosed to (n=97)	
Spouse/Sex partner	
Yes	29(29.9)
Mother	68(69.1)
Yes	
Father	51(52.6)
Yes	
Brother/Sister	27(27.8)
Yes	
Relatives	
Yes	18(18.6)
Friends	
Yes	15(15.5)
Religious leader	
Yes	12(12.4)
Neighbor	
Yes	2(2.1)
Reasons for disclosure(n=97)	
Need for support	33(34.0)
Need to start taking HIV treatment	33(34.0)
To get relief from emotional stress	13(13.4)
Information and counseling from health workers influenced me	18(18.6)
Intend to disclose HIV status (n=133)	
Yes	17(12.8)
No	29(21.8)
Don't Know	87(65.4)

Table 3: Disclosure of HIV status

Characteristics	Frequency n (%)
Advisable to disclose HIV status	
Yes	93(40.4)
No	137(59.6)
Disclosure of HIV status	
Yes	97(42.2)
No	133(57.8)
If yes, Person (s) disclosed to (n=97)	
Spouse/Sex partner	
Yes	29(29.9)
Mother	68(69.1)
Yes	
Father	51(52.6)
Yes	
Brother/Sister	27(27.8)
Yes	
Relatives	18(18.6)
Yes	
Friends	15(15.5)
Yes	
Religious leader	12(12.4)
Yes	
Neighbor	2(2.1)
Yes	
Reasons for disclosure(n=97)	
Need for support	33(34.0)
Need to start taking HIV treatment	33(34.0)
To get relief from emotional stress	13(13.4)
Information and counseling from health workers influenced me	18(18.6)
Intend to disclose HIV status (n=133)	
Yes	17(12.8)
No	29(21.8)
Don't Know	87(65.4)

4.4: Perception of HIV/AIDS Stigma

The mean perception score was 58.3 ± 6.2. About 31.7% of the respondents strongly agreed that they feel guilty because they have HIV while 40% disagreed. Also, 66.5% strongly agreed that most people with HIV are rejected when others find out while 0.4% strongly disagreed. Seventy seven percent of the respondents strongly agreed that they were careful about who they revealed their HIV status to, 20.4% agreed while 0.4% strongly disagreed. More than half (56.1%) of the respondents strongly agreed that most people avoid touching someone with HIV, 27.4% agreed while about 15.2% disagreed. (Table 4).

Over half (54.3%) of the respondents had negative perception of HIV/AIDS stigma. (Table 5)

Table 4: Perception of HIV/AIDS Stigma

Variables	Strongly agree n (%)	Agree n (%)	Disagree n (%)	Strongly disagree n (%)
I feel guilty because I have HIV	73 (31.7)	37 (16.1)	92 (40.0)	28 (12.2)
Peoples' attitude about HIV makes me feel worse about myself.	34 (14.8)	71 (30.9)	96 (41.7)	29 (12.6)
People with HIV lose their jobs when their employers find out	16 (7.0)	128 (55.7)	77 (33.5)	9 (3.9)
I feel I am not as good a person as others because I have HIV	29 (12.6)	47 (20.4)	133 (57.8)	21 (9.1)
I never feel ashamed of having HIV	4 (1.7)	41 (17.8)	63 (27.4)	122 (53.0)
People with HIV are treated as outcasts	87(37.8)	74 (32.2)	54 (23.5)	15 (6.5)
Most people believe that a person who has HIV is dirty	95 (41.3)	65 (28.3)	47 (20.4)	23 (10.0)
Having HIV makes me feel unclean	5 (2.2)	42 (18.3)	110 (47.8)	73 (31.7)
Since learning I have HIV, I feel set apart and isolated from the rest of the world	10 (4.3)	55 (23.9)	151 (65.7)	14 (6.1)
Most people think that a person with HIV is disgusting	10 (4.3)	159 (69.1)	58 (25.2)	3 (1.3)
Having HIV makes me feel I'm bad	3(1.3)	74(32.2)	137(59.6)	16(7.0)
Most people with HIV are often rejected when others find out	153 (66.5)	39 (17.0)	37(16.1)	1(0.4)
I am very careful who I tell that I have HIV	177(77.0)	47(20.4)	5(2.2)	1(0.4)
Some people who know I have HIV have grown more distant	14(6.1)	48(20.9)	136(59.1)	32(13.9)
Most people are uncomfortable around someone with HIV	145(63.0)	63(27.4)	22(9.6)	0(0.0)
I never feel the need to hide the fact that I have HIV	9(3.9)	75(32.6)	52(22.6)	94(40.9)
I worry that people may judge me when they learn I have HIV	9(3.9)	153(66.5)	60(26.1)	8(3.5)
Having HIV in my body is disgusting to me	13(5.7)	87(37.8)	116(50.4)	14(6.1)
Most people avoid touching someone with HIV	129 (56.1)	63(27.4)	35(15.2)	3(1.3)
Some people close to me are afraid others will reject them if it becomes known that I have HIV	30 (13.0)	140 (60.9)	60(26.1)	0(0.0)
I have stopped socializing with some people because of their reactions to my having HIV	13(5.7)	60(26.1)	123(53.5)	34(14.8)

Table 4: Perception of HIV/AIDS Stigma

Variables	Strongly agree n (%)	Agree n (%)	Disagree n (%)	Strongly disagree n (%)
I feel guilty because I have HIV	73 (31.7)	37 (16.1)	92 (40.0)	28 (12.2)
Peoples' attitude about HIV makes me feel worse about myself.	34 (14.8)	71 (30.9)	96 (41.7)	29 (12.6)
People with HIV lose their jobs when their employers find out	16 (7.0)	128 (55.7)	77 (33.5)	9 (3.9)
I feel I am not as good a person as others because I have HIV	29 (12.6)	47 (20.4)	133 (57.8)	21 (9.1)
I never feel ashamed of having HIV	4 (1.7)	41 (17.8)	63 (27.4)	122 (53.0)
People with HIV are treated as outcasts	87(37.8)	74 (32.2)	54 (23.5)	15 (6.5)
Most people believe that a person who has HIV is dirty	95 (41.3)	65 (28.3)	47 (20.4)	23 (10.0)
Having HIV makes me feel unclean	5 (2.2)	42 (18.3)	110 (47.8)	73 (31.7)
Since learning I have HIV, I feel set apart and isolated from the rest of the world	10 (4.3)	55 (23.9)	151 (65.7)	14 (6.1)
Most people think that a person with HIV is disgusting	10 (4.3)	159 (69.1)	58 (25.2)	3 (1.3)
Having HIV makes me feel I'm bad	3(1.3)	74(32.2)	137(59.6)	16(7.0)
Most people with HIV are often rejected when others find out	153 (66.5)	39 (17.0)	37(16.1)	1(0.4)
I am very careful who I tell that I have HIV	177(77.0)	47(20.4)	5(2.2)	1(0.4)
Some people who know I have HIV have grown more distant	14(6.1)	48(20.9)	136(59.1)	32(13.9)
Most people are uncomfortable around someone with HIV	145(63.0)	63(27.4)	22(9.6)	0(0.0)
I never feel the need to hide the fact that I have HIV	9(3.9)	75(32.6)	52(22.6)	94(40.9)
I worry that people may judge me when they learn I have HIV	9(3.9)	153(66.5)	60(26.1)	8(3.5)
Having HIV in my body is disgusting to me	13(5.7)	87(37.8)	116(50.4)	14(6.1)
Most people avoid touching someone with HIV	129 (56.1)	63(27.4)	35(15.2)	3(1.3)
Some people close to me are afraid others will reject them if it becomes known that I have HIV	30 (13.0)	140 (60.9)	60(26.1)	0(0.0)
I have stopped socializing with some people because of their reactions to my having HIV	13(5.7)	60(26.1)	123(53.5)	34(14.8)

Table 5: Perceived HIV/AIDS Stigma

Characteristics	Frequency n (%)
Perception of HIV/AIDS Stigma	
Positive Perception of HIV Stigma	105 (45.7)
Negative Perception of HIV Stigma	125(54.3)

4.5: Sexual Behaviour

Majority of the respondents had had sexual intercourse (81.7%) with nearly half of them having their first sexual intercourse between age 15-17 years (47.9%) and 31.9% having their first sex at less than 15 years (Table 6). More than half of the respondents had had sex since tested positive (69.1%). About 53.8% of the respondents had more than one sexual partner since tested positive, with majority of these sexual partners been casual partners (64.6%), while 3.8% were sex workers. More than half of the respondents said they did not use condoms at all times during sexual acts since tested positive (60.8%) while a larger proportion of the respondents said they changed their sexual behaviour since tested positive (87.2%).

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Table 6: Sexual behaviour

Characteristics	Frequency n (%)
Ever had sex	
Yes	188 (81.7)
No	42(18.3)
Age at first sex(n=188)	
< 15	60(31.9)
15-17	90(47.9)
18+	38(20.2)
Had sex since tested positive (n=188)	
Yes	130(69.1)
Number of sexual partners since tested positive (n=130)	
1	60(46.2)
>1	70(53.8)
Type of sex partners since tested positive (n=130)	
Spouse/co-habiting partner	
Yes	30(23.1)
Boy/Girl friend	
Yes	59(45.4)
Casual partner	
Yes	84(64.6)
Sex worker	
Yes	5(3.8)
Use condoms at all times during sexual acts since tested positive (n=130)	
Yes	50(38.5)
Change in sexual behavior since tested positive? (n=188)	
Yes	164(87.2)
Ways in which sexual behavior has changed (n=188)	
Have not had sex with anyone	
Yes	58 (30.9)
Use condom more frequently	
Yes	30(16.0)
Use condom less frequently	
Yes	73(38.8)
Have more sexual partners	
Yes	21(11.2)
Have fewer sexual partners	
Yes	43(22.9)

4.6: Knowledge of HIV Transmission and Prevention

A lower proportion of respondents reported that HIV can be spread by mosquitoes and through sharing cooking utensils (5.2% respectively). Majority of respondents knew HIV could be transmitted from mother to child (87.8%), blood transfusion (96.1%), sharing of sharp objects (95.2%) and unprotected sex (92.2%) (Table 7). More than two-third of respondents admitted that treatment (67.4%) and consistent use of condoms (69.6%) could prevent transmission of HIV.

On the overall, a higher proportion of the respondents (78.3%) had good knowledge of HIV modes of transmission and prevention. (Table 8)

Table 7: Knowledge about HIV Transmission and Prevention

Characteristics	Yes n (%)	No n (%)
HIV can be spread through mosquitoes	12(5.2)	218 (94.8)
HIV can be spread by sharing cooking utensils	12(5.2)	218(94.8)
HIV can be transmitted from mother to child	202(87.8)	28(12.2)
HIV Can be Transmitted through blood transfusion	221(96.1)	9(3.9)
HIV can be spread through sharing of sharp objects	219(95.2)	11(4.8)
HIV can be spread through sexual intercourse	212(92.2)	18(7.8)
Treatment reduces mother to child transmission	155(67.4)	75(32.6)
HIV can be prevented by using condoms consistently	160(69.6)	70(30.4)

Table 8: Knowledge of HIV Transmission/Prevention

Characteristics	Frequency n(%)
Knowledge of HIV Transmission/Prevention	
Poor Knowledge	50(21.7)
Good Knowledge	180 (78.3)

4.7. Association Between Socio-Demographic Characteristics of Respondents and Disclosure of HIV Sero positive Status

Disclosure of HIV status was strongly associated with education level, marital status as well as person respondent was living with. Respondents with primary education and below had a higher rate of disclosure compared to those with secondary school education and above (P=0.030) (Table 9). Marital status of the respondents was significantly associated with disclosure of HIV status, with those who were never married having a lower rate of disclosure compared to those who were either married, divorced or separated (P<0.001). Also, person(s) respondents were living with was associated with disclosure of HIV status, with disclosure to others (religious leaders, uncles, aunties and friends) having a higher rate than parents and brothers/sisters. This was statistically significant (P=0.012)

Table 9: Association Between Socio-demographic characteristics of Respondents and Disclosure of HIV seropositive status

Socio-demographic Characteristics	Disclosure of HIV Status		Total n (%)	Chi square	P- value
	Yes (%) (n=97)	No (%) (n=133)			
Sex					
Male	26(49.1)	27(50.9)	53(100)		
Female	71 (40.1)	106 (59.9)	177(100)	1.34	0.247
Age					
15-19	45(48.4)	48(51.6)	93(100)		
20-24	52(38.0)	85(62.0)	137(100)	6.82	0.116
Highest Educational level					
Primary and below	24(57.1)	18(42.9)	42(100)		
Secondary and above	73(38.8)	115(61.2)	188(100)	4.72	0.030**
Religion					
Christianity	65(41.1)	93(58.9)	158(100)		
Others	32(44.4)	40(55.6)	72(100)	0.22	0.638
Marital Status					
Never Married	73(35.8)	131(64.2)	204(100)		
Others	24(92.3)	2(7.7)	26(100)	30.21	<0.001**
Occupation					
Student	62(41.6)	87(58.4)	149(100)		
Trading/Business	10(31.3)	22(68.8)	32(100)	3.17	0.365
Unemployed	12(50)	12(50)	24(100)		
Others	13(52)	12(48)	25(100)		
Person(s) living with					
Both Parents	49(35.3)	90(64.7)	139(100)		
Either parent	13(41.9)	18(558.1)	31(100)	10.95	0.012**
Brother/sister	6(42.9)	8(57.1)	14(100)		
Others	29(63.0)	17(37.0)	46(100)		

4.8 Association Between Respondents' Background Characteristics and Disclosure of HIV status.

Family type was strongly associated with disclosure of HIV status with respondents from polygamous family reporting a higher rate of disclosure than those from a monogamous family (P< 0.001). Respondents who had 7 siblings and above reported a high rate of disclosure compared to those with less than 3 siblings (P<0.001) (Table 10). Respondents disclosed more to their mothers who had tertiary compared to those with secondary education and primary school and below, this was significant (P=0.047). Also, mother's occupation was associated with disclosure with a lower disclosure rate among respondents whose mothers were business women/traders compared to those whose mothers were unemployed and those involved in other occupation (P=0.020). Respondents orphan status, parents marital status, father's education and occupation were however not significantly associated with disclosure.

Table 10: Association between Respondents Background Characteristics and Disclosure of HIV Sero-positive Status

Background Characteristics	Disclosure of HIV Status		Total n (%)	Chi square	P- value
	Yes (%) (n=97)	No (%) (n=133)			
Family Type					
Monogamous	54(33.3)	108(66.7)	162(100)		
Polygamous	43 (63.2)	25(36.8)	68(100)	15.21	<0.001**
Siblings					
0-3	29(30.2)	67(69.8)	96(100)		
4-6	49(43.8)	63(56.3)	112(100)	23.36	<0.001**
7-10	19(86.4)	3(13.6)	22(100)		
Orphan Status					
Both Parents Alive	76(42.2)	104(57.8)	180(100)		
Either one or both parents dead	21(42.0)	29(58.0)	50(100)	0.001	0.978
Parents Marital Status					
Currently Married	74(41.6)	104(58.4)	178(100)		
Others	21(45.7)	25(54.3)	46(100)	0.25	0.618
Father's Educational level					
Primary and below	35(53.8)	30(43.5)	65(100)		
Secondary	31(35.6)	56(64.4)	87(100)	5.49	0.064
Tertiary	30(39.0)	47(61.0)	77(100)		
Mothers Educational Level					
Primary and below	44(42.7)	59(57.3)	103(100)		
Secondary	29(34.1)	56(65.9)	85(100)	6.13	0.047**
Tertiary	24(57.1)	18(42.9)	42(100)		
Fathers Occupation					
Unemployed	10(52.6)	9(47.4)	19(100)		
Business/Trader	17(35.4)	31(64.6)	48(100)	3.13	0.372
Civil servant	14(29.8)	33(70.2)	47(100)		
Others	20(34.5)	38(65.5)	58(100)		
Mother's Occupation					
Unemployed	13(43.3)	17(56.7)	30(100)		
Business/Trading	36(31.0)	80(69.0)	116(100)	7.81	0.020**
Others	24(54.5)	20(45.5)	44(100)		

4.9 Association Between Sexual Characteristics of Respondents and Disclosure of HIV status.

Age at first sex, number of sexual partners, condom use were all significantly associated with disclosure of HIV status while change in sexual behavior since respondent tested positive was not significant with disclosure of HIV status.

Table 11: Associations Between Sexual Characteristics of Respondents and Disclosure of HIV status.

Characteristics	Disclosure of HIV Status		Total n (%)	Chi square	P- value
	Yes (%) (n=97)	No (%) (n=133)			
Ever Had Sex					
Yes	74(39.4)	114(60.6)	188(100)		
No	23 (54.8)	19 (45.2)	42(100)	3.34	0.068
Age At First Sex					
<15 years	26(43.3)	34(56.7)	60(100)		
15-17 years	22(24.4)	68(75.6)	90(100)	22.23	<0.001**
18+	26(68.4)	12(31.6)	38(100)		
Had sexual intercourse since tested positive					
Yes	50(38.5)	80(61.5)	130(100)	0.14	0.705
No	24(41.4)	34(58.6)	58(100)		
Number of sexual Partners since tested positive					
1	34 (56.7)	26(43.3)	60(100)	15.60	<0.001**
>1	16 (22.9)	54(77.1)	70(100)		
Consistent use of Condoms in all sexual acts					
Yes	34(68.0)	16(32.0)	50(100)	31.22	< 0.001**
No	15(19.0)	64(81.0)	79(100)		
Change in sexual Behavior since tested positive					
Yes	65 (40.1)	99 (59.9)	164 (100)	0.04	0.842
No	9 (37.5)	15 (62.5)	24 (100)		

4.10 Association Between Socio-Demographic Characteristics and Perceived Stigma

Female respondents had a higher percentage of positive perception of stigma compared to the male respondents, this however was not significant (P=0.707). Perception of stigma differed with age with younger respondents (10-14 years) having a negative perception of stigma than those in the older age group (20-24years) (Table 12), this was statistically significant (P=0.005). Also educational level of the respondents was significantly associated with perceived stigma, respondents with secondary education and above had a higher percentage of positive perception of stigma than those with primary education (P=0.034). However sex, religion, marital status, occupation were not significantly associated with perceived stigma.

Table 12: Association between Socio-Demographic characteristics and Perception of Stigma

Socio-demographic Characteristics	HIV/AIDS Perceived Stigma		Chi square	P- value
	Positive perception (%) (n=105)	Negative Perception (%) (n=125)		
Sex				
Male	23(43.4)	30(56.6)	0.14	0.707
Female	82 (46.3)	95 (53.7)		
Age				
15-19	32(34.4)	61(65.6)		
20-24	73(53.3)	64(46.7)	7.95	0.005**
Highest Educational level				
Primary and below	13(31.0)	29(69.0)	4.47	0.034**
Secondary and above	92(48.9)	96(51.1)		
Religion				
Christianity	76(48.1)	82(51.9)	1.22	0.269
Others	29(40.3)	43(59.7)		
Marital Status				
Never Married	95(46.6)	109(53.6)	0.61	0.434
Others	10(38.5)	16(61.5)		
Occupation				
Student	73(49.0)	76(51.0)		
Trading/Business	14(43.8)	18(56.3)	3.37	0.338
Unemployed	7(29.2)	17(70.8)		
Others	11(44.0)	14(56.0)		
Person(s) living with				
Both Parents	63(45.5)	77(54.5)		
Either parent	12(38.7)	19(61.3)	1.44	0.696
Brother/sister	8(57.1)	6(42.9)		
Others	22(47.8)	24(52.2)		

4.11 Association Between Respondents Background Characteristics and Perceived Stigma

Table 4.7.5 shows the association between respondents' background characteristics and perceived stigma. None of the background characteristics was significantly associated with Stigma.

Table 13: Association between Respondents Background Characteristics and Perceived stigma

Background Characteristics	HIV/AIDS Perceived Stigma		Chi square	P- value
	Positive perception (%) (n=105)	Negative perception (%)(n=125)		
Family Type				
Monogamous	79(48.8)	83(51.2)	2.14	0.143
Polygamous	26(38.2)	42(61.8)		
Siblings				
0-3	43(44.8)	53(55.2)		
4-6	53(47.3)	59(52.7)	0.35	0.838
7-10	9(40.9)	13(59.1)		
Orphan Status				
Both Parents Alive	84(46.7)	96(53.3)		
Either one or both parents dead	21(42.0)	29(58.0)	0.34	0.558
Parents Marital Status				
Currently Married	84(47.2)	94(52.8)	0.95	0.328
Others	18(39.1)	28(60.9)		
Father's Educational level				
Primary and below	29(44.6)	36(55.4)		
Secondary	39(44.8)	48(55.2)	0.22	0.893
Tertiary	37(48.1)	40(51.9)		
Mothers Educational Level				
Primary and below	47(45.6)	56(54.4)		
Secondary	40(47.1)	45(52.9)	0.20	0.905
Tertiary	18(42.9)	24(57.1)		
Fathers Occupation				
Unemployed	5(26.3)	14(73.7)		
Business/Trader	20(41.7)	28(58.3)	5.04	0.169
Civil servant	25(53.2)	22(46.8)		
Others	30(51.7)	28(48.3)		
Mother's Occupation				
Unemployed	9(30.0)	21(70.0)		
Business/Trading	58(50.0)	58(50.0)	5.13	0.077
Others	16(36.4)	28(63.6)		

4.12 Association between sexual characteristics and Perceived stigma

There was a statistically significant association between sexual intercourse since tested positive and perceived stigma. (P=0.022). However, the association between perceived stigma and ever had sex, age at first sex, number of sexual partners and consistent use of condoms were not significant.

Table 14: Association Between Sexual Characteristics of Respondents and Perception of Stigma

Characteristics	HIV/AIDS Perceived Stigma		Chi square	P- value
	Positive Perception (%) (n=105)	Negative Perception (%) (n=125)		
Ever Had Sex				
Yes	85(45.2)	103(54.8)		
No	20 (47.6)	22 (52.4)	0.08	0.777
Age At First Sex				
<15 years	17(28.3)	43(71.7)		
15-17 years	47(52.2)	43(47.8)	10.38	0.06
18+	21(56.3)	17(44.7)		
Had sexual intercourse since tested positive				
Yes	66(50.8)	64(49.2)	5.25	0.022**
No	19(32.8)	39(67.2)		
Number of sexual Partners since tested positive				
1	27 (45.0)	33 (55.0)	1.48	0.223
>1	39 (55.7)	31 (44.3)		
Consistent use of Condoms in all sexual acts				
Yes	23(46.0)	27(54.0)		
No	43(54.4)	36(45.6)	0.87	0.351
Change in sexual Behaviour since tested positive				
Yes	74 (45.1)	90 (54.9)	0.004	0.948
No	11 (45.8)	13 (54.2)		

4.13 Predictors of Disclosure of HIV status.

After logistic regression analysis, the independent predictors for HIV status disclosure amongst young people were found to be age of the respondent, marital status and number of siblings as illustrated in table 15. Respondents within the age group 20-24years were about five times more likely to disclose their HIV status as opposed to those in age group 15-19 years {OR=5.26, 95%CI= 2.09-13.27}. Respondents that were either married/cohabiting/divorced were 0.02 times less likely to disclose their HIV status compared to those that were never married. However, marital status was seen as a protective factor to disclosure of status {OR=0.02, 95%CI=0.001-0.25}. The odds of disclosure of HIV status among respondents who have 4 or more siblings was 0.005 times less than the odds of those with at most 3 siblings {OR=0.005, 95%CI=0-01-0.33; OR=0.08, 95%CI=0.04-0.91}.

In table 16, predictors of the disclosure of HIV status among the sexual characteristics of the respondents were age at first sex, number of sexual partners, and condom use. Respondents that were less than 15 years old at first sexual intercourse were about 2 times more likely to disclose their HIV status compared to those aged 18 years and above at first sexual intercourse. Similarly when compared with respondents who have more than one sexual partners, those who have one sexual partner were 4 times more likely to disclose their HIV status. The odds of disclosure of HIV status among respondents who use condom consistently was 0.11 times less than those who do not use condoms consistently{OR=0.11, 95%CI=0.049-0.250}.

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Table 15: Predictors of HIV status disclosure

Socio-demographics	Adjusted OR	95%CI	P-value
Age			
15-19	5.26	2.09-13.27	<0.001**
20-24	1	1	
Marital status			
Never married	1	1	
Others	0.02	0.001-0.26	0.003**
Education			
Primary and below	0.52	0.13-2.05	0.352
Secondary and above	1	1	
Family type			
Monogamous	0.39	0.12-1.25	0.112
Polygamous	1	1	
Mothers education			
Primary	0.49	0.14-1.74	0.271
Secondary	0.19	0.03-1.27	0.087
Tertiary	1		
No of siblings			
0-3	1		
4-6	0.08	0.04-0.91	< 0.001**
7-10	0.05	0.01-0.33	0.002**
Persons you are living with			
Both parents	0.92	0.27-3.05	0.890
Either Parent	1.39	0.11-17.95	0.790
Brother/Sister	1.55	0.31-7.95	0.550
Others	1	1	
Fathers' education			
Primary	1.20	0.26-5.48	0.810
Secondary	1.97	0.32-12.02	0.460
Tertiary	1	1	
Mothers' occupation			
Business/ trading	0.64	0.14-2.82	0.560
Civil servant	0.52	0.15-1.79	0.300
Others	1	1	

Table 16: Predictors (Sexual characteristics) of HIV status disclosure

Sexual characteristics	Adjusted OR	95% CI	P-value
Age at first sex			
< 15	2.36	1.17-4.76	0.016**
15-17	0.35	0.15-0.83	0.017**
18+	1	1	
No of sexual partners			
1	4.41	2.07-9.40	<0.001**
>1	1	1	
Condom use			
Yes	0.11	0.04-0.25	<0.001**
No	1		
Ever had sex			
Yes	1.86	0.95-3.66	0.070
No	1	1	

Table 16: Predictors (Sexual characteristics) of HIV status disclosure

Sexual characteristics	Adjusted OR	95% CI	P-value
Age at first sex			
< 15	2.36	1.17-4.76	0.016**
15-17	0.35	0.15-0.83	0.017**
18+	1	1	
No of sexual partners			
1	4.41	2.07-9.40	<0.001**
>1	1	1	
Condom use			
Yes	0.11	0.04-0.25	<0.001**
No	1		
Ever had sex			
Yes	1.86	0.95-3.66	0.070
No	1	1	

Table 16: Predictors (Sexual characteristics) of HIV status disclosure

Sexual characteristics	Adjusted OR	95% CI	P-value
Age at first sex			
< 15	2.36	1.17-4.76	0.016**
15-17	0.35	0.15-0.83	0.017**
18+	1	1	
No of sexual partners			
1	4.41	2.07-9.40	<0.001**
>1	1	1	
Condom use			
Yes	0.11	0.04-0.25	<0.001**
No	1		
Ever had sex			
Yes	1.86	0.95-3.66	0.070
No	1	1	

4.14 Predictors of Perceived Stigma by Respondents

After logistic regression analysis, the independent predictors of perceived stigma among HIV positive young people were found to be their age, level of education, age at first sex and sexual intercourse since tested positive as illustrated in table 4.7.9. Respondents aged 15-19years were about 2 times more likely to have positive perception of stigma compared to those aged 20-24years {OR=2.36, 95%CI= 1.33-4.12}. Respondents whose highest level of education is primary and below were about 2 times more likely to have a positive perception of stigma than respondents whose highest level of education is secondary and above{OR=2.13, 95%CI= 1.04-4.36} .

Age of respondents at first sexual intercourse was also found to be a predictor of perceived stigma. Respondents who had their first sexual intercourse at <15years of age {OR=0.350, 95%CI= 0.17-0.71} and those between 15-17years of age {OR=0.323, 95%CI= 0.136-0.765} were 3 times less likely to have positive perception of stigma compared to those aged 18years and above. Similarly when compared with respondents who have not had sex since tested positive, those that have had sex were 0.460 less likely to have positive perception of stigma {OR=0.460, 95%CI= 0.237-0.896}

Table 17: Predictors of perceived stigma by respondents

Variables	Adjusted OR	95% CI	P- Value
Age			
15-19	2.36	1.33-4.12	0.005**
20-24	1	1	
Education			
Primary and below	2.13	1.05-4.36	0.037**
Secondary and above	1	1	
Family type			
Monogamous	0.69	0.36 -1.32	0.260
Polygamous	1	1	
Mothers' occupation			
Unemployed	1.03	0.29-3.56	0.961
Business / trading	0.59	0.27-1.31	0.198
Others	1	1	
Fathers' occupation			
Unemployed	3.32	0.73-15.07	0.120
Business/Trading	1.59	0.71-3.54	0.257
Civil Servants	0.93	0.42-2.06	0.862
Others	1	1	
Age at first sex			
<15	0.35	0.17-0.71	0.04**
15-17	0.32	0.13-0.76	0.01**
18+	1	1	
Had sex since tested positive			
Yes	0.46	0.23-0.89	0.02**
No	1	1	1

4.15 Focus Group Discussion

Two FGD sessions were held comprising of 1 session each for age group 15-19 years old and 20-24 years old. Each group had 8-9 young people (Table 18)

Table 18: Description of Focus Group participants

Category	Number of Groups	Sex	Number in Group
Age Group 15-19 years	1	Female	9
Age Group 20-24 years	1	Female	8
Total	**2**		**17**

The outcome of the discussions is presented based on the questions asked as follows:

1. **Why do you people living with HIV have problem disclosing their status?**

The reasons why people living with HIV prefer not to disclose their status are:

a. Feeling of guilt and shame

b. Avoidance by people especially family members and friends\

c. Hatred from people

d. Fear of their status not been kept a secret (people will disclose their status to others)

Feeling of guilt and shame as well as avoidance by family members and friends are perceived as the major barriers to disclosure of HIV status by almost all the discussants. The reason why they felt that these two are the major barriers is because other barriers will eventually lead to avoidance by people as well as feeling of guilt and shame. The excerpts below buttress participant's opinion about disclosure of HIV status

"...well, to me...to me...is not good for me to disclose my status to people. it is because the people *I will disclose it to are my friends and family and they will not keep it a secret... if I tell them, it is no longer a secret. It will spread. It will even add more to your sadness and you will feel ashamed and feel guilty..."*

15-19 years age group

"...even my parents I don't rely on them. I don't trust them that much. There are things that do happen, the whole compound will know, everyone will know so so thing happened. I don't want hatred and them avoiding me or shifting away from me, but me myself, I like isolating myself...Just like shifting away from people. There are things I have to keep to myself. Not even my parents should know about them..."

20-24 years age group

The outcome of the discussions is presented based on the questions asked as follows:

1. **Why do you people living with HIV have problem disclosing their status?**

The reasons why people living with HIV prefer not to disclose their status are:

a. Feeling of guilt and shame

b. Avoidance by people especially family members and friends\

c. Hatred from people

d. Fear of their status not been kept a secret (people will disclose their status to others)

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"...well, to me...to me...is not good for me to disclose my status to people. it is because the people *I will disclose it to are my friends and family and they will not keep it a secret... if I tell them, it is no longer a secret. It will spread. It will even add more to your sadness and you will feel ashamed and feel guilty..."*

15-19 years age group

"...even my parents I don't rely on them. I don't trust them that much. There are things that do happen, the whole compound will know, everyone will know so so thing happened. I don't want hatred and them avoiding me or shifting away from me, but me myself, I like isolating myself...Just like shifting away from people. There are things I have to keep to myself. Not even my parents should know about them..."

20-24 years age group

2. Who are the best people to disclose to?

Majority of the respondents said parents especially mothers are the best people to disclose one's HIV status to. Reasons why majority of the discussants will prefer to disclose to parents especially mothers are:

- Because mothers understands children more than fathers
- They will not disclose their status to others
- They can be trusted
- They will support you
- They will encourage you to be happy

"... because my parent cannot go out and start telling people my status. And even them, they are sad and they will not like to tell it outside to bring shame to the family. So many people even relative will avoid the family..."

20-24 years age group

Other people that HIV status can be disclosed are spouse and pastors. These were mentioned by two participants from among 20-24 years age group and one from age group 15-19 years.

"...let me say, maybe when you want to marry, you can disclose to your partner when you know that your partner agrees to continue with the relationship if you disclose it to him or her. Then you go ahead..."

3. What are the benefits of disclosing your status?

The two major benefits of disclosure of one's HIV status mentioned by participants are

I. It will relieve you of some burden and make you calm down

II. You will be able to take care of yourself very well

"It will make you feel happy...accepted and loved. .. you will be happy that you have someone who understands you and you will be encouraged to take your medicine.."

20-24 years age group

However, one of the participants among those aged 20-24 years maintained that disclosing one's HIV status has no benefit because it increases the feeling of shame and guilt

"...it is no longer a secret. It will spread. It will even add more to your sadness. You will feel ashamed and feel guilty..."

4. Why do you think people stigmatize people living with HIV?

Most of the participants stated that poor/lack of knowledge about HIV/AIDS is the major reason why people living with HIV/AIDS are stigmatized.

"The bible says my people perish because of lack of knowledge. They feel anybody that has HIV is a low person and can no longer be associated with in the society"

Age group 15-19 years

Other reasons mentioned for stigmatizing people living with HIV mentioned are:

I. *"Because it is a dangerous sickness".*

II. *"Because what they can do, people with HIV can't do them. One's life is so short because of HIV".*

III. *" Because they think the person will soon die"*

IV. *"They think the person with HIV merited this illness. They believed you have sinned against God."*

5. What are the forms of stigma experienced by people who live with HIV

The following are forms of stigma experienced by people who live with HIV

I. Hatred

II. Downgrade

III. Avoidance

IV. Abuse

V. Mockery

6. How does stigma affect people living with HIV?

Majority of the discussants stated that stigma makes them feel rejected and lonely. However, two participants among those aged 15-19 years said that it makes them feel like committing suicide. Also, one discussant age 20-24 years stated that stigma makes her feel bad to the extent that she feel the people stigmatizing them should be infected with HIV.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

This cross sectional study of young people living with HIV gives an insight into socio-demographic profiles and disclosure of HIV status among young people living with HIV/AIDS, as well as factors associated with disclosure and perceived stigma, an important component in a planning strategy for the control of the HIV epidemic among infected individuals.

5.1 Socio-demographic characteristics

The socio-demographic profile of young people at the University of Ibadan Teaching Hospital, Owo revealed that the mean age of respondents was 20.2±2.8 years. This is consistent with several studies such as the study carried out among young people living with HIV/AIDS in Ogun State (Ameyaw, 2012), as well as the findings of NACA2006 which suggested that over half of new HIV infections are occurring among young people (15-24 year olds) (UNAIDS, 2002; NACA, 2011).

This study involved 230 HIV positive young people with the females accounting for about 75% of the respondents. This is contradictory to a study in India where proportion of males was more than the females (Sreenivas et al, 2012). This however corresponds to the study carried by Adedeyo and Ajuwon (2010) where of the 20 respondents who were adolescents living with HIV recruited for the study, about 85% were female respondents. Nworah and Ogbuoji (2012) also reported a higher prevalence of HIV among females than males. Similar studies in Nigeria confirms that females bear a disproportionate burden of the disease. Reports have attributed this gender inequality as evident from studies to the fact the female folks are more likely to be jobless as compared to their male counterparts affecting significantly on the impact of HIV/AIDS in Nigeria (Nigeria UNGASS Report, 2012). The low income status of women which has a positive

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

This cross sectional study of young people living with HIV gives an insight into socio-demographic profiles and disclosure of HIV status among young people living with HIV/AIDS, as well as factors associated with disclosure and perceived stigma; an important component in a planning strategy for the control of the HIV epidemic among infected individuals

5.1. Socio-demographic characteristics

The socio-demographic profile of young people at the University of Abuja Teaching Hospital, Gwagwalada revealed that the mean age of respondents was 20.2±2.8 years. This is consistent with several studies such as the study carried out among young people living with HIV/AIDS in Ogun State (Amoran, 2012), as well as the findings of UNAIDS which suggested that over half of new HIV infections are occurring among young people (15-24 year olds) (UNAIDS, 2002; NACA, 2011).

This study involved 230 HIV positive young people with the females accounting for about 77% of the respondents. This is in contrary to a study in India where proportion of males was more than the females (Sravya et al; 2012). This however corresponds to the study carried by Adebiyi and Ajuwon (2015), were of the 35 respondents who were adolescents living with HIV recruited for the study about 85% were female respondents. Nworuh and Ogbalu (2013) also reported a higher prevalence of HIV among females than males.). Similar studies in Nigeria confirms that females bear a disproportionate burden of the disease Reports have attributed this gender inequality as evident from studies to the fact the female folks are more likely to be jobless as compared to their male counterparts reflecting significantly on the impact of HIV/AIDS in Nigeria (Nigeria UNGASS Report, 2005). The low income status of women which has a positive

link to their lack of access to education is among the key factors that also increase their vulnerability to HIV infection (Pennington, 2007).

Over 60% of respondents had secondary education and about 88.7% of respondents had never been married and were still living with both parents. Similar finding was reported in a study among persons living with HIV in Ibadan; majority of the respondents had secondary education. (Adebiyi and Ajuwon, 2015).

5.2. Disclosure of HIV Seropositive Status

The study found that HIV seropositive disclosure rate among the respondents was (42.2%), most (57.8%) of the respondents had not disclosed their HIV seropositive status. Among those that had disclosed their status, many had disclosed to their parents while only few (29.1%) had disclosed their seropositive status to their sex partners or spouse. This was corroborate by findings from focus group discussions where majority of the discussants prefer to disclose their HIV status to their parents especially mothers majorly because they are trust worthy and will keep it secret while only a few (3 out of 17) participants will disclose to a sexual partner and religious leader before marriage. In line with this, previous studies have shown low levels of disclosure rates to sexual partners among HIV positive individuals (Stein et al., 2003; Sullivan, 2005; Akani and Erhabor, 2006). Contrary to this study, in a study conducted among people living with HIV/AIDS who had been enrolled into care and treatment at General Hospital Abejukolo in Omala Local Government Area of Kogi State, Nigeria, most (58.4%) of them disclosed their HIV status to their partners, others disclosed their status to relations and religious leaders (Salaudeen et al., 2014). The rate of disclosure recorded in this study is worrisome as it could encourage unsafe sex practices and calls for serious focus on behavioural change. It is already a known fact that promotion of sero-positive status disclosure in addition to reducing unsafe sex among HIV-positive persons yields important public health benefits as the increasing

availability of post–exposure prophylaxis makes it possible for HIV negative partners who know they are at risk to obtain treatment in the case of condom failure during sex. Disclosure also increases the awareness of HIV risk to untested partners thus leading to greater uptake of voluntary HIV counseling and testing as well as positive changes in risk behaviors (Ciccarone et al., 2003; Medley et al., 2004).

In this study, among those who had disclosed their status, the reasons given for disclosure were; the need for support (34%), need to start taking HIV treatment (34%) and information and counseling from Health workers (18.6%). Similarly, results of FGD reveals that benefits of disclosure of status to people living with HIV status include emotional relief, encouragement to take drugs as well as it makes them take proper care of themselves. In contrast, the study of Adebiyi and Ajuwon (2015) among HIV positive persons attending the UCH PEPFAR clinic in Ibadan, the major personal reasons given by the respondents who had disclosed their HIV status was that the partner was their confidant (34.1%), to prevent partner from getting infected (21.2%) and so that partner can get tested and receive treatment if need be (21.2%).

The study showed that disclosure of HIV status was strongly associated with age and marital status. Respondents aged 20-24 years were more likely to disclose compared to those aged 15-19 years. This is at variance with research in Haiti where it was revealed that older age group are less likely to disclose their status to a sex partner than younger age group (Conserve et al., 2014). Similarly a study from India found a higher rate of disclosure to partners by literate respondents compared to illiterate respondents (86% vs 44% respectively)(Taraphdaret et al; 2007). Consistent with some studies (Obi and Ifebunandu, 2006; Adebiyi and Ajuwon, 2015), this study found that married respondents were significantly more likely to disclose their serostatus to their sexual partners than the unmarried.

However unlike in some previous studies (Olley et al., 2004; Skogmar, 2006; Ndiaye, 2006; Adebiyi and Ajuwon, 2015), this study did not find any significant association between gender and disclosure of HIV seropositive status.

5.3. Perception of HIV/AIDS Stigma

Over half of the respondents had a negative perception of HIV/AIDS stigma. Majority of the respondents agreed that people had negative impression about HIV positive persons. This was further buttressed by FGD findings where participants mentioned that people stigmatized those living with HIV for various reasons such as; people thinking that HIV is a dangerous sickness, people think HIV positive people will soon die as well as HIV is a merited illness as a result of sin against God. Similarly in the study carried out by Mbonu et al on Societal beliefs and reactions about people living with HIV/AIDS in Portharcourt, it was found that people react negatively towards PLWHA because they know little about the disease. Hence, they cannot handle PLWHA even when it is a close relative (Mbonu et al., 2011).

The findings of this study on perceived stigma however contrast those reported in the National Demography Health Survey Data (NDHS 2013) where majority of the respondents expressed a positive attitude towards those living with HIV (NPC & ICF International, 2014). Also, in this study, majority of the respondents were careful about who they disclosed their HIV status to. The perception of disclosure observed in this study bears semblance to the NARHS Plus 2007 report where half of the respondents wanted to keep relatives who are infected with HIV and AIDS as a family secret (FMOH, 2008). However, a previous study of adults showed that disclosure was associated with better linkage to care and ART adherence (Sayles and Beyene 2000). The observed unwillingness to disclose HIV status in this study may not be far from the perceived negative impression of people about those living with the virus. The fear of stigma and discrimination has been reported to discourage PLHIV from disclosing their status, even to

family members and PLHIV, and undermine their ability to adhere to treatment (UNAIDS, 2010).

This study found that majority agreed that people believe that HIV positive persons are "dirty", this conforms to the findings of a previous study where the most commonly reported stigma by 47% of the participants was that people believe that people living with HIV engage in risky behaviour, such as sexual promiscuity, drug use and prostitution (Nachenga et al; 2012).

Half (52.2%) of the respondents in this study did not feel guilty because they had HIV and majority never felt ashamed of having HIV. This is different from the findings of previous studies which showed that people with HIV feel isolated, guilty, dirty and full of shame which is often incorporated into identity (NACA, 2004). This is however supported by findings from the FGD. An explanation for this unexpected feeling towards the HIV positive status of the respondents in the quantitative study could be as a result of their reported low level of disclosure. As such they are not exposed to the stigma and discrimination associated with HIV positive persons since their status is not known by many.

This study found that educational level of the respondents was statistically significant with perceived stigma; respondents with secondary education and above had a higher percentage of positive perception of stigma than those with primary education. This is not to be expected as higher educational level exposes the ills of stigma and increase its positive perception. Findings are consistent with previous studies (Palmer et al, 2011; Aranda-Naranjo 2004) which suggest that social factors such as education level contribute to stigma because the individuals may lack sense of personal control in their lives and tools that promote resiliency. This study identified an association between stigma and the number of siblings by the participants. Participants who had more than three siblings had high perception of stigma (17.4%) compared to those with less than and equal to three siblings (67.0%).

5.4. Respondents' Sexual Behaviour

Majority of the respondents had had sexual intercourse with nearly half of them having their first sexual intercourse between age 15-17 years and 31.9% having their first sex at less than 15 years. Several studies in Nigeria have confirmed that young adults are sexually active at an early age, engaging in pre-marital sex, prone to high risk behaviours, maintenance of multiple sex partners, having unprotected sexual intercourse (Akani et al; 2005). This is also confirmed by the National Demography Health Survey Data (NDHS 2013) which revealed that over half (50.8%) of adolescents aged 20-24 were sexually active (NPC & ICF International, 2014). This finding also agrees with the findings of previous studies in Nigeria that have reported a high rate of sexual activity among adolescents and young people (FMOH/NARHS, 2005; Bankole, Oye-Adeniran, Singh, Adewole, Wulf, Sedgh & Hussain R, 2006; Imaledo et al., 2012).

More than half of the respondents had had sex since they tested positive and they have also had more than one sexual partner since tested positive, with majority of their sexual partners being casual partners while 3.8% were sex workers. More than half of the respondents do not use condoms at all times during sexual acts since they tested positive. A study conducted among persons living with HIV in Ibadan revealed similar findings though the trend was lower as about one-third of all the respondents had not used condom with any sexual partner since knowledge of their HIV status and about half of those who engaged in unprotected sex had had multiple partners since knowledge of their HIV status. Non-usage of condom during sex promotes HIV transmission to an uninfected person and could lead to re-infection with a drug-resistant strain of HIV for those already infected (Del Rio, 2003; Terrence Higgins Trust, 2001) or infection with another STI which could weaken the immune system (Lane, 2003; Silver, 2003).

A large proportion of the respondents reported a change in their sexual behavior since they tested positive. However, contrary to the findings of a study in Kenya (Sama et al, 2006), the present study found that multiple sexual partners was prevalent despite respondents knowing their

positive HIV status. This is a serious challenge because sexual abstinence and reduction in number of sexual partners are some behavioural strategies used for HIV prevention (UNAIDS, 2006) the findings of this study show that most HIV-positive persons are not engaging these two strategies to prevent the spread of the infection to others. It has been documented that protected sexual activity are most likely to occur when there is commitment to partners at risk for infection, and least likely to occur with casual partners of unknown serostatus (De Rosa et al., 1998). The negative sexual behaviour after knowledge of HIV status recorded here could be as a result of the respondents having more casual partners.

In this study, condom use was significantly associated with disclosure of HIV status with those who disclose using condom more consistently than does that did not. This is in agreement with a study in Kogi state, Nigeria among people living with HIV (Salaudeen et al., 2014).

5.5. Knowledge of HIV Transmission and Prevention

Overall, more than two third of the respondents had good knowledge of modes of transmission and prevention of HIV. This is in line with the findings of the NDHS 2013 survey were majority of the respondents knew the methods of preventing the spread of HIV (NPC & ICF International, 2014). Another study conducted in Tanzania among secondary school students complements revealed that about 70% of the students achieved a 'good' score for HIV transmission and prevention (Maswanya et al., 1999). Also, knowledge about HIV transmission among young people revealed a similar pattern to that of the general population (NARHS 2012). The good knowledge score obtained in this study may be attributed to HIV/AIDS education received by the young people at HIV clinic and during counseling in the hospital. Also the knowledge may be as a result of the inclusion of HIV and reproductive health education in the curriculum of both primary and secondary schools, as such since most of the respondents had primary and secondary education, they may have acquired the knowledge during schooling.

However, despite the high level of knowledge recorded in this study, the respondents were still involved in risky sexual behavior. It is expected that good knowledge influence their behavior according to the Knowledge, Attitude and Practice (KAP) principle. The KAP principle holds that knowledge to a large extent determines attitude and perception towards an illness which will subsequently transform into adoption of appropriate preventive behaviour to avoid risk (Johnson et al., 1999). Therefore the observed risky sexual behaviours among respondents despite their high level of knowledge may be due to the inability of the respondents to use their knowledge of transmission and prevention to assess their risk of infecting others.

5.6. Conclusion

This cross sectional study of young people living with HIV gives an insight into socio-demographic profiles, perceived stigma and disclosure of HIV status among young people living with HIV/AIDS as well as factors associated with disclosure and perceived stigma; an important component in planning strategy for the control of the HIV epidemic among infected individuals.

Majority of the respondents in this study do not support the idea of disclosing HIV positive status, consequently, more than half of them have not disclosed their HIV positive status to anyone. Those who had disclosed their HIV positive status were more likely to disclose to a parent than a sex partner. Also respondents were more interested in disclosing to their positive status for the purpose of support and receiving treatment. Females in this study disclosed their status more than males although the difference was not significant. The study also showed that age and marital status are major influences to disclosure of HIV positive status.

Respondents in this study were aware of the negative impression people have about HIV positive persons however this did not negatively affect their self esteem.

The study reported a significant prevalence of risky sexual behaviours such as having multiple sex partners and inconsistent condom use among the respondents even with the knowledge of their HIV positive status. Respondents did not sufficiently modify their sexual behavior to prevent the spread of HIV even after discovering their positive status. This is probably why the surge of the virus has been endemic despite the huge resources that has been channeled towards its eradication.

Generally it was found that majority of the respondents had good knowledge of HIV transmission and prevention . The evidence of this good knowledge was not however reflected in the sexual practices of respondents especially after they found out about their positive status. This is notable because of the enormous influence knowledge is supposed to have on risk perception and adoption of preventive behaviour.

5.7. Recommendations

1. There is the need for education and counseling of young people living with HIV/AIDS to reduce perceived stigma and increase disclosure rate.
2. Government and community leaders with the full support and participation of the community should ensure full implementation of anti-stigma law and gender centered HIV prevention programmes as well as establish effective and well communicated guidelines in family health

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APPENDIX I

QUESTIONAIRE

PERCEIVED STIGMA AND HIV STATUS DISCLOSURE AMONG HIV POSITIVE YOUNG PEOPLE ACCESSING HIV/AIDS TREATMENT AND CARE AT UNIVERSITY OF ABUJA TEACHING HOSPITAL GWAGWALADA - 2013

STRUCTURED INTERVIEW SCHEDULE

My name is Aderonke A. Popoola. I am a postgraduate student in the department of Epidemiology and Medical Statistics, Faculty of Public Health, University of Ibadan. I am carrying out a research titled "Socio-demographic profile, perceived stigma and HIV status disclosure among HIV positive young people accessing HIV/AIDS treatment and care at University of Abuja Teaching Hospital, Gwagwalada. I am going to ask you some question in this regard. Please note that your answers are completely confidential. Your name will not be written on this form, and will never be used in connection with any of the information you tell me. Your honest answers to these questions will help us to better understand the characteristics of young people living with HIV/AIDS including their perception of stigma and factors influencing disclosure of HIV status.

This information will further help us understand how to plan effective interventions that will address the HIV prevention needs of young people living with HIV/AIDs. You are free to refuse to take part and you can withdraw from the study at any time you chose to. I would greatly appreciate your help in responding to this interview.

Thank you

Consent: The study has been well explained to me and I fully understand the content of the study process, I will be willing to participate.

Participant's signature_____ **Date** _____/_____/_____

Interviewer's signature_____ **Date** _____/_____/_____

QUESTIONAIRE SERIAL NUMBER: .....

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

1. Residential Location (Where do you live?)

   State.....Area.....

2. What is your Age as at your last birthday? ..... years

3. Gender 1. Male 2. Female

4. What is your Highest Level of Education? 1. None 2. Quranic 3. Primary 4. Secondary 5. Tertiary

5. What is your Religion? 1. Islam 2. Christianity 3. Traditional 4. Others, specify.....

6. What tribe are you? 1. Yoruba 2. Hausa 3. Igbo 4. Others, specify.....

7. What is your marital status? 1. Never married 2. Currently Married 3. Separated 4. Divorced 5. Widowed 6. Cohabiting 7. Others, specify

   .....

8. What is your Occupation? .....

9. What type of Family do you come from? 1. Monogamous 2. Polygamous

10. How many of brothers and sisters of the same parents do you have? .....

11. Are your parents alive? 1. Both alive 2. Father alone alive 3. Mother alone alive 4. Both Dead 5. Don't know

12. What is your Parent's Marital Status? 1. Never married 2. Currently Married 3. Separated 4. Divorced 5. Widowed 6. Cohabiting 7. Others, specify.....

13. Father's highest level of Education? 1. None 2. Quranic 3. Primary

4. Secondary 5. Tertiary

14. Mother's highest level of education? 1. None 2. Quranic 3. Primary

4. Secondary 5. Tertiary

15. If Father alive, what is his Job Status? 1. Currently employed 2. Currently unemployed

3. Don't know

16. If currently employed, what is his occupation?

.....

17. If Mother alive, what is her Job Status? 1. Currently employed 2. Currently

unemployed 3. Don't Know

18. If currently employed, what is her

occupation?.....

19. Who are you currently living with? 1. Both parents 2. Father alone 3. Mother alone

4. Uncle 5. Aunty 6. Others, specify.....

(If Father and/or Mother Go to Question 24)

20. What is the marital status of your Guardian (The person you are living with)? 1.

Never married 2. Currently Married 3. Separated 4. Divorced 5. Widowed

6. Cohabiting 7. Others,

specify.....

21. What is the highest educational level of your Guardian's (The person you are living

with)? 1. None 2. Quranic 3. Primary 4. Secondary

5. Tertiary 6. Don't Know

13. Father's highest level of Education? 1. None 2. Quranic 3. Primary

4. Secondary 5. Tertiary

14. Mother's highest level of education? 1. None 2. Quranic 3. Primary

4. Secondary 5. Tertiary

15. If Father alive, what is his Job Status? 1. Currently employed 2. Currently unemployed

3. Don't know

16. If currently employed, what is his occupation?

.....

17. If Mother alive, what is her Job Status? 1. Currently employed 2. Currently

unemployed 3. Don't Know

18. If currently employed, what is her

occupation?.....

19. Who are you currently living with? 1. Both parents 2. Father alone 3. Mother alone

4. Uncle 5. Aunty 6. Others, specify.....

(If Father and/or Mother Go to Question 24)

20. What is the marital status of your Guardian (The person you are living with)? 1.

Never married 2. Currently Married 3. Separated 4. Divorced 5. Widowed

6. Cohabiting 7. Others,

specify.....

21. What is the highest educational level of your Guardian's (The person you are living

with)? 1. None 2. Quranic 3. Primary 4. Secondary

5. Tertiary 6. Don't Know

22. What is the job status of your Guardian (The person you are living with)?

1. Currently employed 2. Currently unemployed

23. If currently employed, what is your Guardian's occupation?

.....

24. Who did you live with in your early childhood?

.....

25. How often do you take alcohol? 1. Daily 2. Weekly 3. Occasionally

4. Never

26. How often do you smoke cigarette? 1. Daily 2. Weekly 3. Occasionally

4 Never

SECTION B: HIV STATUS DISCLOSURE

27. Do you think it is advisable for people to tell others their HIV/AIDS status? 1. Yes 2.

No

28. If yes to **Q27** who is the most appropriate person/people to be informed of someone's

HIV/AIDS status? 1. Parents 2. Spouse 3. Girlfriend/Boyfriend

4. Close friend 5. Religious leader 6. Neighbor

7. Others, specify.....

29. Have you told anybody about your HIV/AIDS status? 1. Yes 2. No **(If No Go**

to Q32)

30. If yes to **Q29** above whom have you told that you are HIV positive?

	Yes	**No**		**Yes**	**No**
Sexual partner	1	2	Relatives	1	2
Mother	1	2	Friends	1	2

22. What is the job status of your Guardian (The person you are living with)?

1. Currently employed 2. Currently unemployed

23. If currently employed, what is your Guardian's occupation?

.....

24. Who did you live with in your early childhood?

.....

25. How often do you take alcohol? 1. Daily 2. Weekly 3. Occasionally

4. Never

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4. Close friend 5. Religious leader 6. Neighbor

7. Others, specify.....

29. Have you told anybody about your HIV/AIDS status? 1. Yes 2. No **(If No Go**

to Q32)

30. If yes to **Q29** above whom have you told that you are HIV positive?

	Yes	**No**		**Yes**	**No**
Sexual partner	1	2	Relatives	1	2
Mother	1	2	Friends	1	2

Father	1	2		Religious leader	1	2
Child	1	2		Neighbours	1	2
Other family members	1	2		Others, specify.....	1	2

31. Why did you reveal your HIV status? 1. Need for support 2. Need to start taking HIV treatment 3. To get relief from emotional stress 4. Information and counseling from health workers influenced me 5. Other, specify.....

32. If No to **Q29** why have you not told anybody your HIV status? 1. Fear of rejection by my community 2. Fear of ejection from home 3. Fear of separation/divorce 4. Loss of job 5. Fear of accusation of infidelity 6. Stigma and discrimination 7. Withdrawal from school 8.Verbal abuses from family and friends 9. Other, specify.....

33. Do you intend to disclose your HIV status later? 1. Yes 2. No 3. Don't know

SECTION C: PERCEPTION OF STIGMA

Section C contains a list of statements about experiences, feelings and opinions as to how people with HIV feel and how they are treated. For each item, please indicate by circling the respondent's answer on the three point scale: 1('Strongly Agree'), 2('Agree') and 3('Disagree'), 4("Strongly Disagree")

	Statements *Please read each statement to the respondent and complete the scale appropriately*	Strongly Agree Agree	Agree	Disagree	Strongly Disagree

		Circle ONE number only			
		1	2	3	4
34	I feel guilty because I have HIV	1	2	3	4
35	People's attitudes about HIV make me feel worse about myself	1	2	3	4
36	People with HIV lose their jobs when their employers find out	1	2	3	4
37	I feel I am not as good a person as others because I have HIV	1	2	3	4
38	I never feel ashamed of having HIV	1	2	3	4
39	People with HIV are treated like outcasts	1	2	3	4
40	Most people believe that a person who has HIV is dirty	1	2	3	4
41	Having HIV makes me feel unclean	1	2	3	4
42	Since learning I have HIV, I feel set apart and isolated from the rest of the world	1	2	3	4
43	Most people think that a person with HIV is disgusting	1	2	3	4
44	Having HIV makes me feel I'm a bad person	1	2	3	4
45	Most people with HIV are rejected when others find out	1	2	3	4

46	I am very careful who I tell that I have HIV	1	2	3	4
47	Some people who know I have HIV have grown more distant	1	2	3	4
48	Most people are uncomfortable around someone with HIV	1	2	3	4
49	I never feel the need to hide the fact that I have HIV	1	2	3	4
50	I worry that people may judge me when they learn I have HIV	1	2	3	4
51	Having HIV in my body is disgusting to me	1	2	3	4
52	Most people avoid touching someone with HIV	1	2	3	4
53	Some people close to me are afraid others will reject them if it becomes known that I have HIV	1	2	3	4
54	I have stopped socializing with some people because of their reactions to my having HIV	1	2	3	4

SECTION D: SEXUAL BEHAVIOUR AND KNOWLEDGE ABOUT HIV TRANSMISION AND PREVENTION

55. Have you ever had sex? 1. Yes 2. No **(If no, GO TO Question 64)**

56. How old were you the first time you had sexual intercourse? .....

57. Have you had sex since you FIRST tested positive for HIV? 1. Yes 2. No

(If no, GO TO Question 61)

58. How many partners have you had sex with since you tested positive? 1. One 2. More than one

59. What type of partner(s) have you had sex with since you tested positive?

	Yes	No
A. Spouse or person you live with but not married to	1	2
B. Boyfriend/Girlfriend	1	2
C. Sex worker	1	2
D. Casual partner	1	2

60. In the sexual acts with your partner since you tested positive did you use condom all the time?

1. Yes 2. No

61. Will you say your sexual behavior has changed since you tested positive? 1. Yes 2. No

(If No Go to Q63)

62. If yes to **Q61**, in what way (s)? **(MORE THAN ONE RESPONSE POSSIBLE)**

	Yes	No
A. Have not had sex with anyone	1	2

B. Use condoms more frequently 1 2

C. Use condoms less frequently 1 2

D. Now have more sexual partners 1 2

E. Now have fewer sexual partners 1 2

F. Others, specify.....

63. Have you ever been forced to have sex? 1. Yes 2. No

Now I will like to ask you some questions about ways of spreading and preventing HIV

64. Can HIV be spread through mosquitoes? 1. Yes 2. No

65. Can HIV be spread by sharing cooking utensils 1. Yes 2. No

66. Can HIV be transmitted from mother to child? 1. Yes 2. No

67. Can HIV be transmitted through transfusion

of infected and unscreened blood 1. Yes 2. No

68. Can HIV be spread through sharing of sharp object? 1. Yes 2. No

69. Can HIV be spread through sexual intercourse? 1. Yes 2. No

70. Can treatment reduce mother to child transmission of HIV? 1. Yes 2. No

71. Can HIV be prevented by using condoms correctly all the time? 1. Yes 2. No

B. Use condoms more frequently 1 2

C. Use condoms less frequently 1 2

D. Now have more sexual partners 1 2

E. Now have fewer sexual partners 1 2

F. Others, specify.....

63. Have you ever been forced to have sex? 1. Yes 2. No

Now I will like to ask you some questions about ways of spreading and preventing HIV

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69. Can HIV be spread through sexual intercourse? 1. Yes 2. No

70. Can treatment reduce mother to child transmission of HIV? 1. Yes 2. No

71. Can HIV be prevented by using condoms correctly all the time? 1. Yes 2. No

THANK YOU FOR YOUR TIME.

ETHICAL APPROVAL

UNIVERSITY OF ABUJA TEACHING HOSPITAL

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Our Ref: UATH/UATH/HREC/PR/315

Your Ref:

Date: 5/6/13

Popoola Aderonke Anna
C/O Dr Stanley Garuba
P O Box 10127
Garki - Abuja

RE: Socio-Demographic Profile, Perceived Stigma and HIV Status Disclosure Among HIV Positive Young People Accessing HIV/AIDS Treatment and Care at University of Abuja Teaching Hospital Gwagwalada.

I am pleased to inform you that approval has been given to conduct the above named study.

The approval is for one year and will lapse on 5/6/14. If for any reason the study is not commenced as per the expected date, the committee should be appropriately informed.

Any change to the protocol would necessarily require an approval from the committee.

Best wishes.

Edith Akanya
Secretary (UATH HREC)